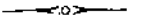
ADDRESSES

DELIVERED AT

The Mysore University Convocations
1918—1929



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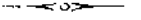

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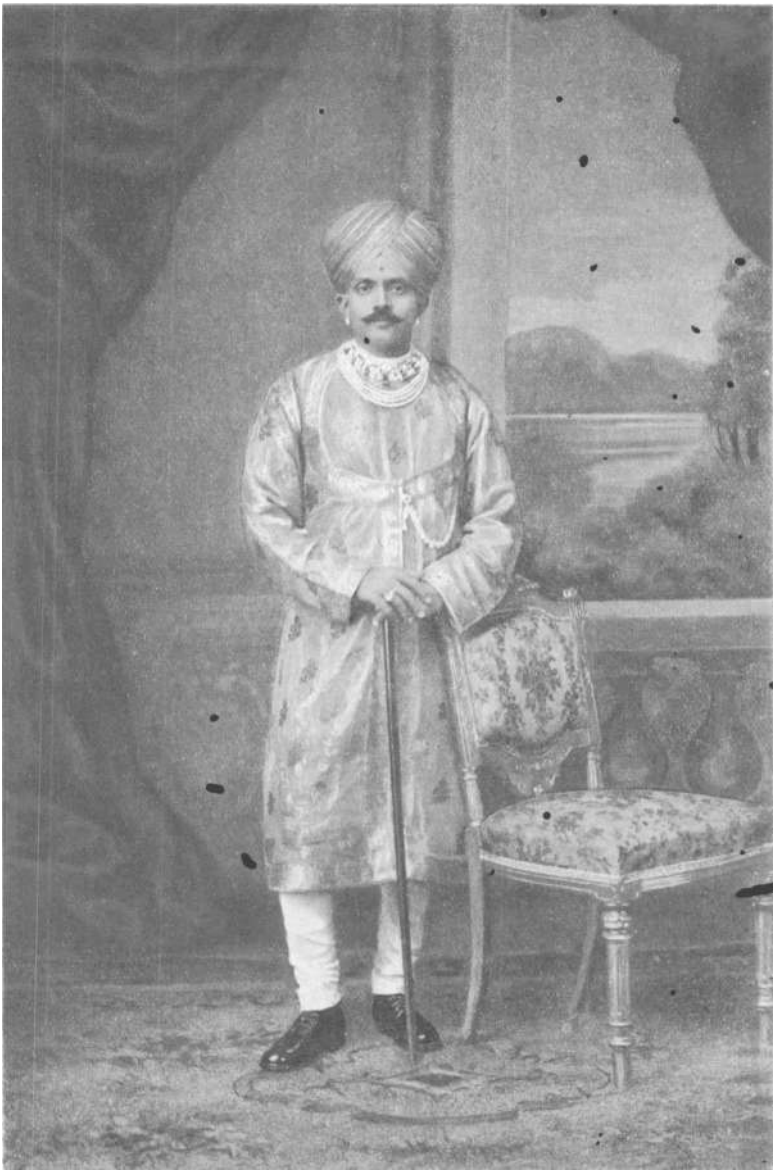

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HIS HIGHNESS

SIR SRI KRISHNARAJENDRA WADIYAR BAHADUR, G.C.S.I., G.B.E.

MAHARAJA OF MYSORE

THE BANGALORE PRESS, MYSORE ROAD,
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PREFACE

THIS collected Edition of the Convocation Addresses delivered before the University of Mysore since its foundation has been issued in response to frequent requests for copies of the same. I am indebted to the Mysore University authorities for the kind permission accorded by them to reprint the Addresses and issue them in their present compendious form. The Addresses have been reprinted in the manner in which they were finally passed by their respective authors from copies of the same courteously supplied by the University authorities. Thanks are due to Sir Brajendranath Seal, until recently Vice-Chancellor of the Mysore University, for the kindly interest he displayed in the publication. Mention should also be made of the help extended in a variety of ways by Mr. B. M. Srikantia, Registrar of the Mysore University.

To enhance the utility of the publication, an Index to the Addresses has been added.

BANGALORE,
10th July 1930.

C. H.

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MYSORE UNIVERSITY CONVOCATION ADDRESSES

Speech delivered at the First Convocation of the University of Mysore on 19th October 1918 by His Highness The Maharaja of Mysore, Chancellor.

MR. VICE-CHANCELLOR, LADIES AND GENTLEMEN,

It was with great pride and pleasure that I presided two yeare ago at the First Meeting of the Senate of the Mysore University, and it gives me even more gratification to attend this, our First Convocation, which will always be remembered as a land-mark in the history of Education in Mysore.

On the last occasion that I addressed you I referred to the circumstances which led to the foundation of our University and to the hopes and ambitions which I entertained for its future. It is satisfactory to find from the Annual Report of the University that the ideals referred to in my address have been steadily kept in view. During the past two years the University has enlarged its activities by instituting the degrees of Commerce and Engineering, and proposals are under consideration for starting other Faculties.

I am gratified to learn that both the Engineering College and the Commerce classes have attracted a large number of students, more in fact than we could afford to admit. This is a healthy sign, indicating an appreciation on the part of the Public of the business and technical side of education.

Considerable additions have been made to the teaching and Professorial staff of the University, and I am glad that we have succeeded in securing the services of Professors of known ability and high qualifications.

It is my earnest desire that the higher education of women should be increasingly developed, and I wish that I could have seen not one, but ten lady graduates before me to-day. I look farward to the time when every district in Mysore will be supplied with trained lady graduate teachers.

Our University attaches great importance to the study of the Vernaculars which are made compulsory throughout the course, and the Publication Bureau is doing very useful work in encouraging the publication of books written in good idiomatic " Kannada". I am particularly interested, too, in the means which are being adopted to encourage the study of Sanskrit. The Sanskrit Library, which is under a re-organized

Committee, will find fuller scope for its activities when it enters into possession of the new building now under construction. I trust that the University will do all in its power to foster the study of our mother-tongue and of Sanskrit, two languages which must always command the sympathy and interest of all educated Mysoreans.

The lectures under the University Extension Scheme have so far been confined to the two university centres of Mysore and Bangalore, and I am glad to find that the work is now being extended to the interior of Mysore. This is, I think, a very important development, for it is to the remote parts of the State, which have not the educational advantages of our two capital cities, that we should specially direct our efforts with a view to introducing a higher standard of culture among the people.

I attach the highest importance to a proper Tutorial System in this University, and I understand that a serious effort is being made to introduce a Tutorial Scheme. The problem is a difficult one.

I am particularly interested in the housing of the University students, and it is satisfactory to find that the University realizes its responsibility in this matter. The buildings and conveniences

of the Maharaja's College Hostel have been recently extended, and I hope that no time will be lost in providing further accommodation for the students of the Central and Engineering Colleges at Bangalore. Many of our students cannot afford to live in the hostels, and an endeavour should be made to establish cheap messing houses in suitable localities for such students.

Education should not be confined to intellectual effort. Its physical, moral and social aspects should receive their due attention even in a teaching University. The erection of Union buildings both here and at Bangalore is an important step in this direction, and I hope that some workable scheme of physical culture, with voluntary Medical Inspection, may be shortly introduced. A cricket pavilion has been built at Mysore, and I hope that a Swimming Bath will before long give our students a new form of exercise and recreation.

But even more significant than all the signs of activity and progress which I have touched on, is the fact that the Mysore University has been exceedingly jealous in maintaining the high standard of its examinations, and that its authorities realize the importance of appointing outside examiners.

In our enthusiasm for our University we must not forget that its efficiency largely depends on the schools which serve as its feeders. Already our University is trying to improve these institutions by setting a high standard for the Entrance Examination, by prescribing the curricula of the collegiate classes, and by their inspection and general supervision. My Government have only recently sanctioned very generous grants for the better equipment of their important classes.

There is, unfortunately, a limit to the resources which my Government can afford to place at the disposal of the University. The cost of higher education is steadily increasing, and if educational opportunities are to be open to all my subjects and not confined to the richer classes only, public support must be forthcoming in an ever increasing degree. I am glad to learn that during the short period of its existence, the University has evoked the spontaneous liberality of many public-spirited citizens, and has received endowments to the value of over one lakh of rupees.

It is a gratifying fact that we have been able to hold our First Convocation at the actual seat of our University, and in the centre of those new buildings which are a tangible proof of

our earnest desire to make the Mysore University a complete and fully equipped seat of learning.

It is only fitting that I should refer on this public occasion to the wonderful succession of victories which are crowning the arms of the British and Indian armies and their allies in the terrible war which has hung like a cloud over the civilized world for over four years. Thank God the cloud is lifting, and a victory in the cause of justice and liberty seems to be actually in sight. But though the cloud of war is showing a silver lining, we are, I grieve to say, passing through a dark period of adverse season and epidemic disease which cannot but sadden us all. The monsoon has failed in many parts of the State, and the prolonged drought and war conditions have raised the cost of the necessaries of life to famine prices. Added to this, a severe influenza epidemic has appeared and raised the mortality to alarming proportions. I appeal to the public to fight the scourge with courage by means of effective local organization and mutual help. I have directed that no expenditure should be stinted, or efforts spared, on measures of relief, so far as they lie in the power of my Government; and I may assure the people that my own

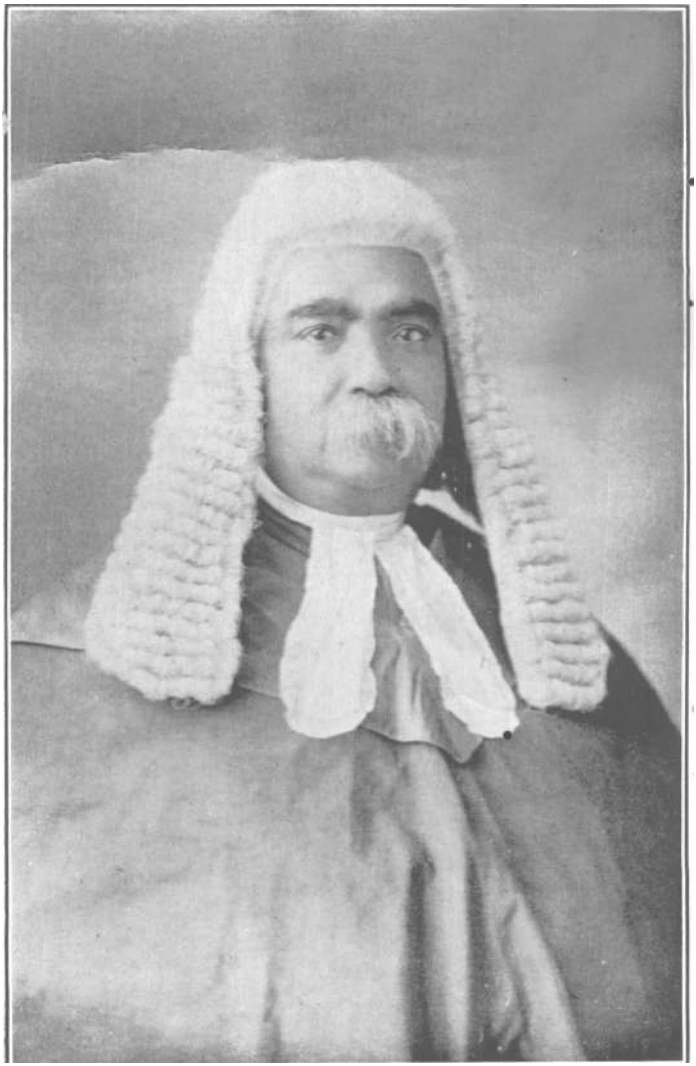
thoughts are constantly with them in their sufferings and bereavements.

I feel that I should acknowledge on this public occasion a debt of gratitude from myself and my people to Sir M. Visvesvaraya, the Dewan of my State. It was chiefly his patriotism, his enthusiasm, and his unflinching advocacy which converted, what was once little more than a dream of the future into a living creation, and his name will always be remembered, above all others, as the man to whom our University owes its being.

I will not detain you by any long words of exhortation addressed to those who have received the hall-mark of a University degree to-day. That duty I can leave with perfect confidence to my guest Sir Asutosh Mookerjee who, at much sacrifice of time and trouble, has given testimony to his unflagging interest in the cause of University education by consenting to come to Mysore and address you. I need hardly tell him how very grateful I feel to him, and how highly I appreciate his presence here to-day. I would like, however, to give you graduates one thought to carry away with you, by quoting some eloquent words used by Mr. Asquith in a Rectorial Address to the students of the University of Aberdeen :—

"Keep always with you, wherever your course may lie, the best and most enduring gift that a University can bestow—the company of great thoughts, the inspiration of great ideals, the example of great achievements, the consolation of great failures—so equipped you can face without perturbation the buffets of circumstance, the caprice of fortune, all the inscrutable vicissitudes of life."

I will now call upon Sir Asutosh Mookerjee to address the graduates.



Sir Asutosh Mookerjee, Kt., C.S.I., M.A., D.L.

Address delivered at the First Convocation of the University of Mysore on 19th October 1918 by Sir Asutos' Mookerjee, late Vice-Chancellor of the University of Calcutta.

YOUR HIGHNESSES, MR. VICE-CHANCELLOR, LADIES AND GENTLEMEN,

I feel deeply embarrassed as I look round this distinguished gathering of representatives of the intellect and aristocracy of the most progressive of Indian States beyond the limits of British India. The invitation to address you, issued under the direction of His Highness the Chancellor, by your first citizen, whom it is a privilege to know and respect, was couched in such terms of courtesy and cordiality that ready acceptance was inevitable. Apart from this, refusal was really inconceivable, as the invitation had emanated from a Ruling Prince, whose high character, judged by the most exacting standards, had called forth the deepest feelings of reverence and admiration from all who had ever the good fortune to come into contact with him, and who so fittingly enjoyed the unique distinction of uniting in himself the dignified office of Chancellor in two Indian Universities. I am not ashamed, however, to make the frank

confession that ever since my acceptance of your kind invitation, I have regretted my rashness, and have repeatedly wished that I had not shouldered so serious a responsibility. But as duty once undertaken, even though thoughtlessly, can never be declined, I can only claim your generous indulgence, while I detain you with a few brief observations on the question now foremost in the mind of every member of this assembly—what should be the guiding principles of this newly founded University, which will be consecrated in years to come by the loyal and loving allegiance of successive generations of Mysoreans, how will her imperative needs be met so as to place and keep her, the equal of the greatest, the peer of the noblest, in the progressive world of science, letters and art?

Do not imagine for a moment that I shall be so unwise as to hazard a definition of a University, a task which has baffled many an acute scholar and cultured administrator. They have asked, from time to time, what is a University, and have found themselves at sea. Is it a a set of fine buildings? Is it an educational institution which has beneficent patrons and has secured the gift of a million? Is it an aggregate of four Faculties? Is it a scholastic guild?

Is it a society of masters? Is it an assembly of students? Is it an examining body authorized to grant degrees? Is it a corporation of individuals who investigate the unknown, but neither teach nor test? Is it a combination of colleges without religion? Is it an association of teaching institutions without a curriculum? Must it possess all or any of these characteristics? Or is it, as Samuel Johnson inspired, perhaps, by his boundless knowledge of things ancient and modern, boldly enunciated in the first edition of his famous Dictionary, a school where all the arts and faculties are taught and studied, or is this merely a stimulating but impossible ideal formulated by that profoundly learned Doctor? Blame me not, if I deem it needless, for our present purposes, to seek a definitive solution of these puzzles.

Let us provisionally assume as correct the description that a University is a corporation of teachers and students, banded together in the pursuit of learning and for the expansion of the bounds of knowledge. A University thus constitutes the visible manifestation of the activities of the State in the domain of the highest grades of education for the benefit of the people. From this standpoint, we realize the supreme

importance of two fundamental principles. In the first place, a University can achieve the complete fulfilment of its purpose, only if at the time of its foundation, it is adapted to the special needs and circumstances of the people whom it is designed to serve. In the second place, a University will retain its vitality and usefulness unimpaired, only if it ever continues to be wisely articulated to the true requirements of the community, if its governors sedulously watch the ever varying needs of the people from time to time, from generation to generation, and mould and develop their institution accordingly. These principles, so formulated, cannot be successfully challenged, and may almost bear the semblance of unimportant platitudes.

But though it has been often asserted that all Universities cannot be expected to be uniform in character and cast in the same mould, yet, in this continent, when a new University is created or an existing University is reconstructed, the attempt is repeatedly made to model it on the pattern of a University in another country, organized under very dissimilar conditions and flourishing in entirely different surroundings. The oft-repeated axiom is, in this sphere, apt to be ignored or overlooked, that you cannot completely westernize the East any more than

you can fundamentally easternize the West. The demand may thus legitimately be made that when Universities are constituted in India—and we anxiously look forward to the day when they will multiply in number and increase in vigour—they will not be unintelligent and uncritical imitations of educational institutions elsewhere. Explore the conditions patiently, sympathetically, dispassionately, and then your constitution with courage, even though the frame result be unlike ancient and venerable foundations which shed lustre on other climes.

But when the Universities have been so constituted as the result of independent enquiry and judgment, their utility would be seriously affected, nay their purpose would be ultimately defeated, if they were to lose their elasticity and assume a form stereotyped for ever. Fetters they have not imposed upon them in their inception; shackles they shall not forge for themselves in the course of their career. The history of many a famous University, however, affords convincing proof that the dangers of extreme conservatism are by no means imaginary. Universities, as they grow, acquire traditions, sometimes the product of centuries, which tend to enchain them to the Past. The imperative call of the ever-changing needs of

the people who cannot escape the operation of world-forces, doubtless compels the Universities from time to time to review their ideals, to revise their methods, to extend the horizon of their activities, to answer the challenge thrown out to them by the voice of Progress; but the general tendency has been a pathetic adherence to old ideals and a reluctant recognition of the claims of the insistent Present. This has favoured the creation of new and potent educational agencies, the foundation of new Universities, in response to new demands of diverse kinds—their scope and character largely shaped, the lines of their activities deeply influenced by the circumstances which called them forth into existence. Problems of compulsory Greek and obligatory Sanskrit seem veritably insoluble, while the modern sciences, which have silently revolutionized the life of humanity, and profoundly affected its hopes, ideals and aspirations, patiently await academic patronage in the ante-room.

I trust some gifted historian of education will narrate the romantic story of the usurpation of the academic territory by the wise schoolmen of the Middle Ages, their displacement by the learned professors of the Humanities, the unwelcome intrusion of the iconoclastic devotees of the

physical and natural sciences on the scene, and the entry, almost in our own generation, of the sturdy adherents of applied science, the resolute champions of technical and commercial instruction, who seem determined to fight undaunted to the finish the battle of "practical" against "liberal" education, of "useful" against "useless" knowledge. Let me plead, consequently, for freedom in the University, freedom in its inception, freedom in its administration, freedom in its expansion; surely this is the very condition of vigorous existence in an institution engaged in search after Truth. Keep your University, therefore, free from the baneful influence of Dogmas; their domination is equally deleterious whatever their source, whether they be official, political, religious or academic. Indeed, the corporate repressive action of a University which fails to link by a golden thread the experience of the past with the aspirations of the future may be as potent a factor for mischief as external, non-academic interference with its activities.

Will you now patiently bear with me for a while, as I rapidly sketch a very imperfect outline of an educational policy which it is my dream may be deemed worthy of trial, at no distant date, in an Indian University? The time at my disposal

will not allow me even to touch the fringe of the vast area of secondary education, elementry and advanced, and I shall premise the existence of a net-work of well-organized schools training pupils for real University education, which is a development, an amplification, and, in many respects, a complement of school education. Such pupils, when they seek admission into the University, should be required to pass a fairly searching test, but the standarad need not be ideally exacting, and undoubtedly neither capricious nor arbitrary. It is requisite at this stage of the career of the student; that his powers of expression, reasoning and observation should have been adequately developed. He should in the first place have a thorough command over his Vernacular, which, under normal conditions, would be, up till then, the chief, if not the exclusive, medium of acquisition of knowledge; he may be resonably expected to possess an accurate knowledge of its grammatical structure, and a fairly wide acquaintance with the best specimens of its literature; he should also have regularly cultivated the art of composition and be able to express his ideas with ease and elegance, clearness and precision. In addition to this, he should, for obvious reasons, have acquired a sound working

knowledge of English language, as distinguished from English literature, and his critical faculty should have been sharpened by a comparison and contrast of the idiom, diction, method and manner of the two languages. In the second place, his power of reasoning should have been developed by a prolonged training in Arithmetic, Algebra and Geometry, experimental as well as theoretical. In the third place, his power of observation should have been developed by a practical study of select branches of the experimental sciences, including, if possible, experimental mechanics. Finally, his mental vision should have been widened by a study of a classical language, the geography of the world, the histories of India and England, and, if possible, also by a rudimentary knowledge of modern history. A student of average ability and industry, who has had proper training in such a course—in a large measure through the medium of his Vernacular—has, by the age of seventeen, been equipped with the elements of a liberal education and should be fully qualified to receive the benefits of a three-year course for the first degree at a University.

Here comes the all-important point that a student of this description, on his entrance into the University, should have the choice of a rich

variety of courses. All sources of knowledge must be open to all students as they want them. Ample provision should be made for liberal, for professional and for so-called useful studies, under the guidance of first-rate teachers, the most eminent, the most earnest, the most independent in their work, for it is the eagle alone that is fit to teach the eaglets. We must realize that an institution of University rank must aim at a sphere of study and of consequent influence as wide as the whole domain of human activity; we may profitably take a lesson from the momentous decision of an Asiatic Potentate in the land of the Rising Sun, half a century ago, that knowledge shall be sought for throughout the world. In this progressive age, a University cannot with safety confine its activities to some special department, and degenerate into a school of letters, or a college of commerce, or an assemblage of laboratories and workshops. It must frankly recognize the kinship of the arts and sciences and the inherent interdependence of all study and research, supplement theoretical by practical studies, and liberalize technical and professional instruction by organic connection with arts and letters. I can imagine no step more unwise for an Indian University to take than to give exclusive prominence to studies peculiarly

Indian. Do not misunderstand me. Indian History, Indian Antiquities, Indian Literature, Indian Philosophy, Indian Religion, Indian Mathematics, Indian Astronomy, Indian Medicine, Indian Sociology, Indian Economics, Indian Administration, Indian Art, indeed, all the monuments of Indian culture imperatively demand critical and comparative study in an Indian University. But while I appreciate the value of adequate provision in these departments and regard them as essential factors in the organization of our University, I cannot but emphasize the paramount need for fully equipped technical institutions of all grades, with courses of scientific study, theoretical and applied; for in this age—brand it as materialistic, if you please—the trained special expert is at least as indispensable to society as the most accomplished theoretical scholar.

Review for a moment the characteristics of this age, though I have no desire to appraise the relative value of the different civilizations, competing in the great struggle to lead humanity. During the last half a century, the civilized world has witnessed with admiration the gigantic strides made by the intellect of man in the conquest of Nature; the developments have been as astonishing in character as they have been rapid in

multiplication. The discoveries and appliances of the physical and natural sciences have facilitated the establishment of technological institutions and the promotion and enlargement of all departments of industries. To them we owe those remarkable inventions, which substitute the sinews of nature for the muscles of men and animals in the works of production; that wonderful facility of transport and distribution which makes the most precious products of each clime the source of comfort of every people; and that ever marvellous system of communication which has almost annihilated time and space and which enables each living man to sit in his chamber and converse with all other men in whispers. But these achievements of physical power, whether we regard them as means of destruction or as instruments for preservation, are but the product of the educated mind; they are under the absolute control of ideas, and whether they shall really promote or destroy civilization depends entirely upon the wise or unwise discretion of that omnipotent commander, the human mind. It is consequently a hundred-fold truer in the present than in any previous age, that ideas rule mankind, and it is not individuals, not kings, not emperors, not armies, not fleets, but ideas which overturn

established systems and revolutionize social forms.

Let me ask, then, what course shall we choose while the world all around us is making such gigantic strides in the path of progress, ever seeking to gain mastery over the forces of Nature. We cannot disentangle ourselves, even if we wish, from irresistible world-currents, and sit on the lovely snow-capped peaks of the Himalayas absorbed in contemplation of our glorious past. It is most emphatically true that the community, the people, the nation, the race, which like the Greek philosopher will live in its own tub, and ask the conquering powers around it to move away from its sunshine, will soon be enveloped in eternal darkness, the object of derision for its helplessness, and of contempt for its folly. We cannot afford to stand still; we must move or be overwhelmed. We cannot waste precious time and strength in defence of theories and systems which, however valuable in their days, have been swept away by the irresistable avalanche of world-wide changes. We can live neither in nor by the defeated past, and if we would live in the conquering future, we must dedicate our whole strength to shape its course and our will to discharge its duties. The most pressing question

of the hour for the people of every race is, not what they have been hitherto, but what they shall determine to be hereafter, not what their fathers were, but what their children shall be. The past is of value only in so far as it illuminates the present, the present is of value only in so far as it guides us to shape the future. Let us then raise an emphatic protest against all suicidal policy of isolation and stagnation.

If we thus realize the full significance of this world-wide struggle of civilized man to secure ascendency over the forces of Nature, what effective measures shall we devise to make our people worthy of an honourable place in the contest. The answer involuntarily springs to my lips, let us expand our Universities; that is the first step in upward progress; from them will flow an irresistible stream of educational facilities for the elevation of the masses. Our own sons must be taught to build and operate machinery. Furnaces and foundries, studios and workshops, must be deemed as honourable and made as abundant as the offices of the learned professions, and they must be filled with our own children, made experts in our own schools of science. Then and then alone shall we be able to make adequate provision for the full utilization of our

raw materials. I feel humiliated when I realize the enormous extent to which the products of our inexhaustible natural resources are carried away to foreign shops by adventurous exploiters, the masters of educated industries elsewhere, who apply to them their skill and art, freight them back as manufactured articles, resell them for our use, and profit by the multifold increase in value. What more telling illustration could one imagine than the manufacture of sandal oil which, to the infinite credit of your Government, is now carried on within your territory and under the supervision of the children of the soil. This, however, is not a solitary, an isolated example. When my countrymen have been adequately trained and have been afforded free and full opportunity to employ their talents, what they can accomplish in the way of utilization of our boundless natural resources of diverse descriptions, is amply illustrated by the achievements of Sir Seshadri Iyer and Sir Visvesvaraya who have played a distinguished part in the organization of gigantic works of public utility which have extorted the admiration of unfriendly critics. It may consequently be asserted without fear of contradiction that if we are to live, if we are to survive this age of struggle, we must keep pace

with the rest of the world in scientific pursuits. We must realize that it is a fatal mistake to make ignorance the primal law of labour, for there is no labour which skill cannot elevate and improve. Let us honour and educate labour, and train our children to business and callings other than those that have hitherto monopolized the appellation of "learned professions".

I have emphasized this aspect of the subject from the deep conviction that the beginning of all real improvement in your State lies in the wise and steady development of your system of education. Education is like water; to fructify it must descend. Pour out flood at the base of society and only at the base, it will saturate, stagnate and destroy. Pour it out on the summit; it will quietly and constantly percolate and descend, germinate every seed, feed every root, until over the whole area from summit to base will spring

"The tender blade and then the ear
And then the full corn in the ear."

The struggle for national existence and progress is so keen that I earnestly entreat you to make tuition free in every department of your University. Offer education free of charge to your students. Lay no tax upon the acquisition

of knowledge. Demolish the toll gates which bar the passage of light; let knowledge reach the ignorant mind, as air goes to the tired lungs and water to the parched lips. Let every father in Mysore feel and be made to rejoice in the conviction that his son has a patrimony in the University of his State. Be not alarmed at this ideal; I urge you further to arrange for the proper selection, from every corner of the State, of the promising children of orphanage and indigence, who will find here that parental kindness and smile of fortune which would secure food and raiment with education. Establish systems of scholarships and fellowships and require their recipients to distribute throughout the State the blessings they receive from the State. In the desperate struggle for existence, in the present age, it is incumbent upon you to educate each of your citizens to the utmost of his capacity. Believe me, you cannot afford to ignore the needy and the indigent; let intellectual deficiency, let moral obliquity, but let not poverty be the bar to the acquisition of knowledge. Resolutely refuse to be frightened by the assertion that a system like this would require immense means. Forget not that education is the one subject for which no people has ever yet

paid too much. The more they pay, the richer they become, for nothing is so costly as ignorance, nothing is so cheap as knowledge. Explore the history of civilization, ancient and modern; you will find that the people who provided the greatest educational opportunities were always the most wealthy, the most powerful, the most respected, the most secure in the enjoyment of every right of person and property. This truth will be a hundred-fold more manifest in the future than it has ever been in the past, as the struggle for existence grows keener and keener. The very right arm of all future national power will rest in the education of the people. Power is leaving thrones and is taking up its abode in the intelligence of the subjects. Modern science is writing many changes in the long-established maxims of economics. Capital no longer patronizes labour, but enlightened labour takes capital by the hands and directs it where, when and how it should be invested. Educated industry has taken possession of the inexhaustible stores of Nature and of her forces, is filling the earth with her instruments of elevation and improvement, is bidding kings and rulers, empires and republics obey. The wealth, power, security and success of existing nations are accurately measured by the standards and

extents of their educational systems, and those nations possess the highest standards and the most efficient and widely diffused systems of education which have taken the greatest pride in the endowment and advancement of their Universities. Bold, indeed, must be the man, who will venture to characterize these nations as wasteful, unwise or oppressive upon their people, because they liberally maintain their seats of learning.

I do not propose on the present occasion to detain you with the examination of another highly controversial question, the burning question indeed of the age, namely, whether University training so develops the character as really to befit men for their work in the momentous conflict of life. It is sufficient to state that in my judgment it is impossible to emphasize too strongly the elementary truth that the formation of character is of infinitely higher consequence than the absorption of knowledge. Though the circumstances of the time have compelled me to devote the main portion of my address to what may be called the intellectual and material side of our activities, I do not under-rate the supreme value of the spiritual element. But I feel convinced that in an Indian University, addressing an Indian audience, it is superfluous for me to impress upon my

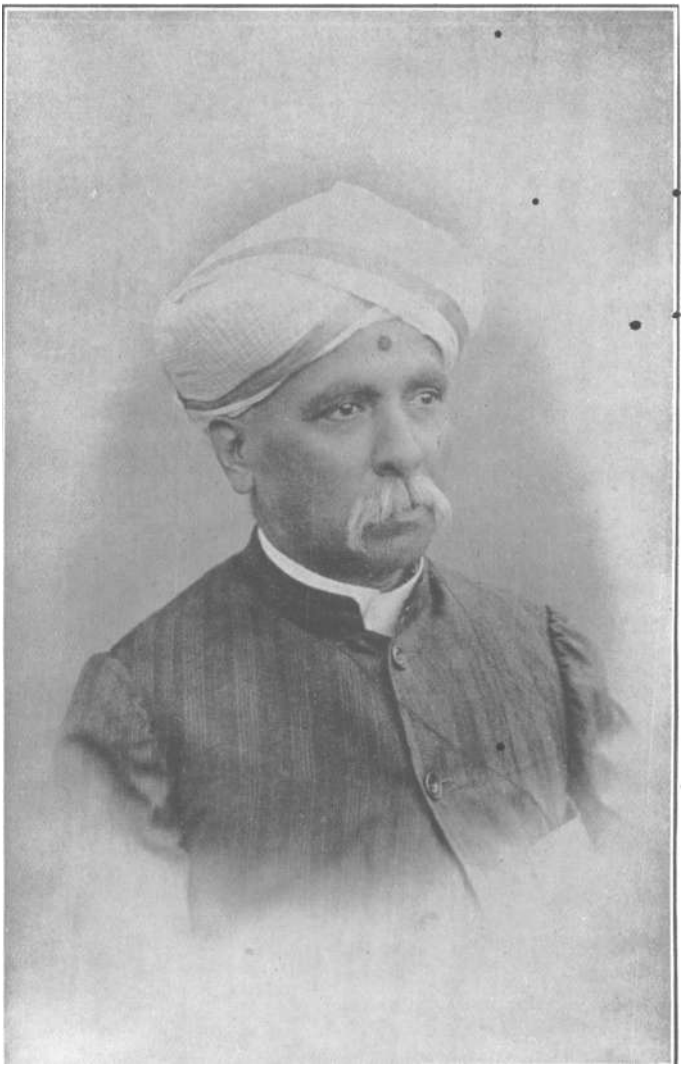
young friends the paramount importance of the lesson that whether we turn our eyes to the unfathomed depths of the sea or the boundless regions of space, beyond the things which are seen and temporal, are the things which are unseen and eternal. First graduates of the University of Mysore, take to heart this fundamental truth, and never forget that you shall be responsible for the future of your State. That future will be anything you command; herein lies your grave responsibility. You have promissed to your University, symbolished in your Chancellor, that to the utmost of your opportunity and ability, you will support and promote the cause of morality and sound learning, and that you will, as far as in you lies, uphold and advance social order and the well-being of your fellowmen. These are not idle forms, but words of deep import and great solemnity, deliberately uttered by you as men of honour. Realize the full significance of the obligation under which you have placed yourselves, towards your University, your State and your fellow-subjects. Remember that it is not enough to be a good man and to achieve success in life. There is a loftier ambition than merely to stand high in the world; it is to stoop down and lift mankind

higher. There is a nobler character than that which is merely incorruptible; it is the character which acts as an antidote and is preventive of corruption. Fearlessly speak the words which bear witness to righteouness, truth and purity. Patiently do the deeds which strengthen virtue and kindle hope in your fellowmen. Generously lend a hand to those who are endeavouring to climb upward. Faithfully give your support and your personal help to all efforts to elevate and purify the social life of the world. That is the way to make your life savoury and powerful. The men that have been happiest, the men that are best remembered are the men that have worked for the redemption of Society. Good men are not like trees, planted by rivers of waters, flourishing in their own pride and for their own sake, but they are like eucalyptuses, reared in the marshes, diffusing a healthful tonic influence and countervailing the poisonous miasma. They are like the tree of Paradise whose leaves are for the healing of nations. Be not content, therefore, merely to avoid evil and the forces of corruption. Society requires, not passive resisters but active helpers. It lies in you to illustrate the inefficacy of an education which produces learned shirks and refined

skulkers. It lies in you to illuminate the perfection of an unselfish culture with the light of devotion to humanity. It is for you to prove that you are able to use all that you have learnt for the end for which it was intended, to enable you to lead the life of active benefactors of your community. Choose then as the motto of your life the noble sentiments of a poet beautifully expressed :

"I live for those who love me,
For those who know me true,
For the heaven that bends above me,
And the good that I can do,
For the wrongs that need resistance
For the cause that lacks assistance
For the future in the distance
And the good that I can do."

If the nobility of your souls rises to this height, I feel no doubt as to your future. From every corner of this State, there comes this day an earnest anxious voice to you enquiring, will you rise higher or fall yet lower, will you live or will you die, will you command or will you serve. Gathering in my own the voices of you all and with hearts resolved and purposes fixed, I send back the gladsome response, you shall rise, you shall live, you shall command.



Rajamantrapravina H. V. Nanjundayya, C.I.E., M.A., M.L.

Address delivered at the Convocation of the University of Mysore on 10th October 1919 by Rajamantrapravina H. V. Nanjundayya, Esq., C.I.E., M.A., M.L., Vice-Chancellor.

MAY IT PLEASE YOUR HIGHNESS

To permit me to make a brief statement about the condition of the University and the results of its work during the past year.

Seven hundred and sixty candidates presented themselves for the Entrance Examination and 215 or about 28 per cent were successful. The proportion of passes was somewhat less than in the previous year, a reduction mainly attributable to the general backwardness in English and in one of the Science subjects. It is to be hoped that improvements in the staff and the equipment of the Collegiate High Schools together with a rise in the qualifications of the pupils will bring about the change that is desirable in this respect.

In the B.A. Examination which is held in two parts, 109 were examined for both the parts and 64 passed in both the parts. Twenty-one students appeared for one part only and fourteen passed. On the whole, seventy-eight candidates

qualified themselves to receive the degree, one being placed in the first class. Fifteen students appeared for the B.Sc. Degree Examination which was held for the first time this year and twelve passed it, two of them in the first class.

These results show that the comparative strictness of our Entrance test prevents a large influx of the unfit and keeps down the number of failures in the University Course.

The number of students in the University increased from 619 to 734, by 95 in the Maharaja's College and 38 in the Engineering College, while in the Central College there was a decrease of 20 pupils. This decrease need not, however, cause any uneasiness, as it is due to the Engineering College drawing away a number of those who would otherwise have taken up the Science subjects. In the Maharaja's College, 76 students were studying for the degree of Bachelor of Commerce.

The Entrance and the B.A. Classes of the Maharani's College for women have been separated from the lower department and transferred to the management of the University, the institution thus becoming a constituent College in the full sense, from the beginning of the present year. The number of students in

the B.A. Classes increased from five to eight, and there was one woman student in the Maharaja's College.

The Intermediate Examination in Engineering was held for the first time this year. Forty candidates were examined and thirty-four passed, four of them being placed in the first class.

Seventeen students of whom two are ladies have enrolled themselves for the M.A. Degree Courses newly started in the Maharaja's College in the subjects of English, Sanskrit, Philosophy and History and Economics.

The B.Sc. Course in Zoology was newly opened in the Central College and since the beginning of the current year, the third year's classes have been opened in the College of Engineering, in the two branches of Civil and Mechanical Engineering.

To the University Library, 2,614 volumes were added during the year, and orders were placed for books worth about sixty thousand rupees. Notwithstanding the erection of new galleries, we are already cramped for space.

Some additions were made to the staff of the Colleges. Two Professors were newly posted to the Maharaja's College, and one—a lady

—to the Maharani's College, and one Professor and two Assistant Professors and a Drawing Instructor to the College of Engineering. The number of Professors and other teachers in the University is 77 giving an average of one teacher to 9.5 pupils.

Besides taking part in tutorial guidance of the students, some members of the professorial staff were engaged in original research and literary work, and some of them took part in the delivery of extension lectures in the two cities and in two or three other places.

Under the head of Publication the *University Magazine* continued to be ably conducted by Mr. Denham, and the department has also to its credit the substantial encouragement afforded to the production of some important works in Kannada. Prizes were awarded for two original works on the History of India, one on the English Constitution, and one on Astronomy, and arrangements are being made for their early publication.

Private donations to the amount of forty thousand rupees have been offered and accepted during the year, the chief of them being a sum of twenty thousand rupees from Khan Bahadur Haji Ismail Sait, nine thousand from Jahagirdar

Mr. Narasinga Rao Purnayya and five thousand and five hundred from Rao Sahib Mr. M. Rama Rao. The donations, which in view of the moderate level of wealth in the country are quite fair, are a very welcome sign of the general interest aroused by the foundation of a local University, but we must for a long time to come depend mainly on the liberality of Government for support, as we cannot expect any private benefactions, as *e.g.,* in the case of the Calcutta University on a large scale.

The budget of expenditure which, in 1915-16 when the University was started, was but three and a half lakhs, is nine and three-fourths lakhs for the current year, of which about seven lakhs represent permanent recurring expenditure. Great as is the increase, proving the solicitude of Your Highness' Government of the rapid improvement of the University, there are urgent needs to be provided for within the next few years which require and deserve the exercise of Your Highness' generosity in even larger measure.

We have not yet completed the equipment required for all the departments that we have inaugurated. In the Science Department, the M.Sc. Course which could not be opened this

year for want of adequate facilities, has to be organized and begun from the beginning of 1920-21. For the same reason the Electrical branch of the Special Courses for students who pass the Intermediate Examination in Engineering had to be put off. In view of the importance of this course and the demand for it, it is necessary that it should also be opened as early as possible.

Turning to new subjects, the University Course for the subject of Teaching for which already a small provision has been made in the budget, is under the consideration of the Senate, and may have to be provided next year. The opening of a Medical College has been urged by the Senate more than once, and the final decision now rests with Your Highness' Government, and depends on the view which they will take of the urgency of the demand for this grade of instruction compared with the existing facilities for the students and the expenditure that has to be incurred on it. A Scheme for a Law Degree being instituted was passed by the Senate and submitted to Government, but was ordered to lie over. A reconsideration of the last order has been suggested.

Your Highness has approved of the preliminary proposals made for the establishment

of an Agricultural College, and the matter of devising a detailed scheme is under the consideration of the Council and the Senate. This, and the removal of the College of Engineering to Mysore, will demand a large outlay in the near future. The extension of the Students' Hostel in Bangalore is another urgent matter; and such is also the erection of a suitable hall for holding examinations and such large meetings as the Convocation of the University in this city. And though not a direct concern of the University, the fuller equipment of the Collegiate High Schools and especially provision for relieving the Central College of the duty (temporarily undertaken) of finding room and means for the teaching of Science to the Bangalore High School classes are matters seriously affecting the interests of the University students.

Not only in India but throughout the world, there is great ferment and widely felt aspiration towards reform and reconstruction in educational methods and matters. The Monumental Report of the Calcutta University Commission which has been recommended by His Excellency the Viceroy as deserving the study and attention of a larger circle than the particular University for whose benefit it was primarily intended, shows that in

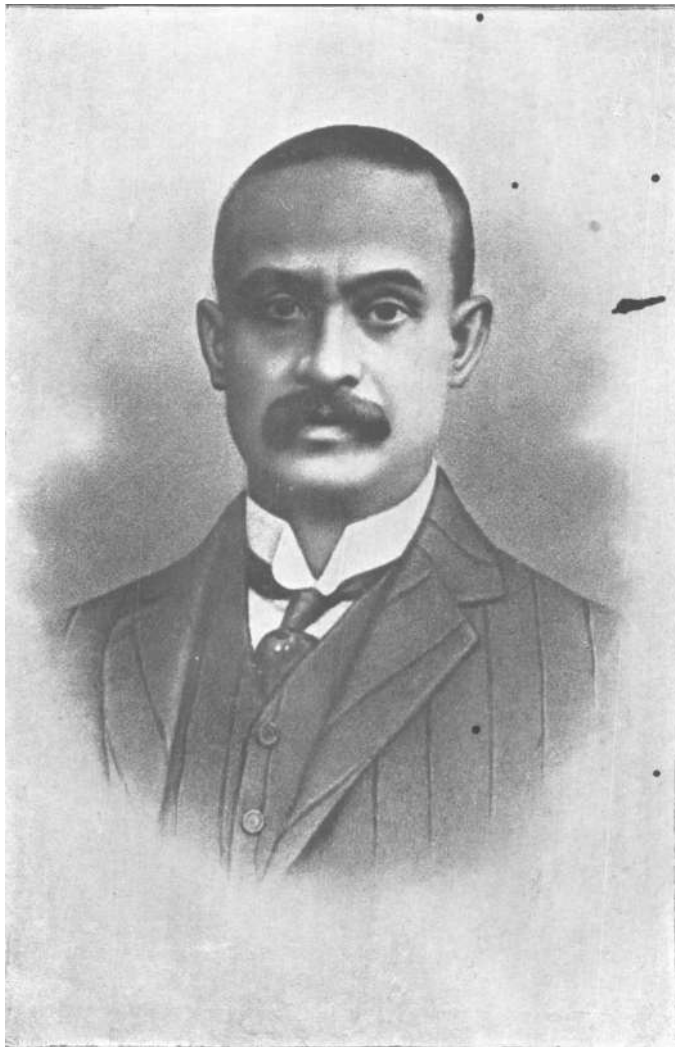
the important features in which we have made a new departure, we have proceeded, on the whole, in the right direction.

We have been thought by some critics to be too ambitious in our schemes, and taken by others to be merely smaller editions of existing Universities, reproducing all their defects, and containing no element of Indian culture such as one should expect in an Indian State. Of late indeed a great deal of vague and indefinite longing has come to be associated with the term national education. While we should scrupulously guard all the invaluable stores of knowledge we have inherited from the past, and take care that we do not become mere feeble imitations of foreign models, we should not lose sight of the fact that there are whole departments of knowledge and learning which either did not exist or were very backward in our own country, and that it is impossible to preserve our position, not to speak of advancing to higher rank, among the nations of the world, unless we assimilate much of what Western savants and scientists have peculiarly made their own. There is a vast field for research and for co-ordination with present ideas and needs in our national literature and monuments of past culture. We were perhaps too much under the

influence of non-Indian guides and instructors, whose natural limitations and often acquired prejudices did not allow them to do full justice to our past history or present conditions. Much has been done and is being done in other parts of India to remedy this defect and remove this reproach to our self-respect. It is our ambition also to contribute our humble share of work in this noble sphere. But we should not forget that in most things of knowledge that matter, there can be no nationalism. There is not one mode of culture and one system of knowledge for India, and a different method and system for England. Language is merely the vehicle of thought, and learning and research do not become undesirable exotics when they are clothed in other languages than our own. We need not therefore be ashamed of pleading guilty to a charge of conservatism, when we decline to be led away by sonorous phrase and specious logic to upset our settled scheme of education, and rush into untried experiments on the future welfare and progress of our student population. While we are as anxious as others to introduce useful reforms and improvements in our University system, consistent with our needs and within our resources, wo do not wish to run the risk of

endangering our existing structure by digging away its foundations. And it is our earnest hope that with the zealous and disinterested labour of the able band of Professors and Teachers, with which the generosity of Your Highness' Government has staffed the University and continuous assiduity of an ever increasing number of enthusiastic students, we shall more and more deserve a worthy place in the company of the older and larger Universities of India, some of whom have already honoured us by extending their right hand of fellowship.

I now beg Your Highness to open graciously the Second Convocation of the University of Mysore.



Sir Abdur Rahim, Kt., M.A.

Address delivered at the Convocation of the University of Mysore on 10th October 1919 by Sir Abdur Rahim, Ag. Chief Justice, High Court, Madras.*

YOUR HIGHNESSES, MR. VICE-CHANCELLOR, FELLOWS OF THE MYSORE UNIVERSITY, LADIES AND GENTLEMEN,

When His Highness, the Chancellor, honoured me with the invitation to deliver an address to-day, I accepted it readily and with pleasure. It would indeed have been difficult for me, an Indian, to fail to comply with such an invitation from a ruler so justly renowned for his enlightened and beneficent administration of one of the most important self-governing States of India. It is a real pleasure to me to have the opportunity of saying something on this occasion as, ever since I first visited Bangalore in 1909, the conviction has grown upon me that the State of Mysore

*This Address by Sir Abdur Rahim was the Convocation Address for the year. The Address of Mr. H. V. Nanjundayya printed in the preceding pages (30 to 40) was delivered by him in opening the proceedings of the day.

is one of the best fitted in India to be a great centre of learning, research and social service.

Its agreeable climate makes unflagging devotion to intellectual pursuits possible, while its mines and minerals, its forests and water power afford opportunities to the scientist hardly to be rivalled elsewhere in the country. Its picturesque natural scenery and its storied past, decipherable in monuments and inscriptions and in the ruins of ancient cities and powerful kingdoms, furnish entrancing themes not only for the inspiration of the poet and the romancist but also for the student of History and Archæology. Moreover this State has fortunately inherited traditions and conventions ordinarily associated with constitutional forms of Government, so that the atmosphere of harmony, security and freedom so essential to the growth of scholarship is largely available here, and is moreover to a large extent undisturbed by political struggles which are apt to absorb elsewhere the thought and energy of the most intellectual sons of the country.

Mysore University and its Future.

If I were asked to forecast the future of the Mysore University, I should unhesitatingly say that its development will be mainly along the

lines of scientific and technical work. That is doubtless the modern tendency of all Universities, and it is natural and meet that this tendency should be emphasized in one born in the second decade of the twentieth century. There are besides special and cogent reasons why the Mysore University will specialize in the pursuit of science and in technological training. I assume that the Mysore Government is going to pursue steadily the aim it has set before itself of developing the economic resources of the State as one of its most vital functions. That time is long past when the duty of the Government of a country was supposed to consist mainly in keeping peace and order, an idea which was born of the times when the people were deemed to exist for the Government and not the Government for the people and when Government was regarded as an outside force and not an organization of the will and resources of the people for the advancement of their welfare. The advocates of masterly inactivity as the ideal of Government have no longer any hearing. Curiously enough, this idea which is regarded as the latest tendency of socialism has been embedded in the oriental conception of Government from time immemorial. The rulers of the East have been always looked up to

as the guardians and custodians of the interest of the people in every aspect of social life. It may be, that was because in the olden days the only powerful and stable organization was the Government. But whatever the explanation the fact remains. Akbar who was perhaps the wisest ruler History has known, thought it to be within the scope of his royal functions to invent a common language for the people and even to found a new religion which would serve the common needs of the country—the two greatest factors in the making of a nation.

Development of Natural Resources.

The Mysore Government, by healthy instinct and not as a result of any socialistic propaganda, has rightly taken upon itself the development and organization of the natural and industrial resources of the State. This will not only enrich the people and place more funds at the disposal of the Government but every workshop and factory, every engineering work and mining establishment and every preserved forest will become so many training grounds for the student of the sciences and of technology. They will help to accelerate the progress of scientific knowledge and research at a pace which laboratories and

libraries alone could not do. The very atmosphere of a great industrial State will serve to stimulate the practical and inventive faculties of the people. It is then that libraries and laboratories and institutions like the Indian Institute of Science so munificently supported by this Government as an educational asset of great possibilities, will yield rich and abundant harvests. We have often heard complaints during the last 15 years how Indian students in search of technical training met with insuperable difficulties in finding admission in workshops and factories in India or in England. Many of them went to America, Japan and elsewhere and such among them as succeeded in acquiring practical training and experience found on their return that there were no houses of business which would give them employment. I shall however be greatly disappointed if the students of the Mysore University will not find their way considerably smoothed for them in this respect.

The Importance of Literary Side.

I have dwelt on what will perhaps be the more pronounced aspect of University work in Mysore but I must not be understood to minimise in the least degree the importance of what is called

the literary or humane side of education. While the inculcation of useful knowledge and the training of intellect must always be kept in view at every distinct stage of the educational course, the building up of a strong character, the cultivation of the finer sympathies and imagination and of noble aspirations must be regarded as an essential function of every sound system of liberal education.

It is to the great credit of this Government that it has so fully recognized the supreme importance of education, due in a large measure to His Highness the Maharaja's personal zeal in the cause. The reason why education is now universally recognized as a sacred and most important duty of a Government is obvious. It is the most comprehensive and effective means of uplifting the people to their highest destiny. Education, in fact, is co-extensive in significance with civilization; there can be no civilization without education and an educated community is necessarily civilized. In the conception of modern educationists there is hardly any limit to be laid down to the scope of education. It consists in impressing into service all noble and useful thoughts, ideas and suggestions of the best men of all ages and climes, in developing to the fullest

degree the mental and physical, emotional and spiritual faculties of men.

Effect of War on Education.

It is my firm belief that the time is fast approaching when education will receive far greater attention in India than hitherto, and that partly because of the lessons of the great war which has just ended but from the shock of which the world cannot be said to have yet recovered. This war, as every one realizes, has been the greatest evil from which mankind has suffered in all parts of the Globe, comparable only to the traditional Deluge. But the worst calamities have often useful lessons to teach us. Let us fervently hope that the greatest lesson of this war will ultimately be to induce the powerful nations of the earth to devise effective means for preventing wars in the future. I confess, however, that, at present, the prospect is not at all cheering in this respect. It almost seems that so long as there are weak and helpless peoples so long the stronger nations will fight among themselves for mastery and dominion over them. I will tell you a small anecdote. The day after the war was declared by England with Germany and before the declaration of war with Austria I happened to

meet an Austrian professor in London. In the course of conversation I casually asked him if Germany had an eye on poor India as well. His significant answer was that Germany would no doubt regard it as a great thing to have three hundred millions of men under her power and control. I need hardly say that the answer opened my eyes.

War and Organized Effort.

What, however, I would most earnestly ask my countrymen to realize is the remarkable revelation the war has made of the unlimited possibilities of organized combined effort. Millions of men, as you know, drawn from all countries of the world, Europe, the Russias, America, India, Canada, Australia, New Zealand, Egypt, Africa, Arabia were formed into huge armies which incessantly fought for four years, on land, on sea, in air and under water through winter and summer, in snow, hail, blizzard and rain, in burning tropical deserts and ice-bound northern seas, in swamps and marshes full of pestilence. The myriads of soldiers and sailors were led by hundreds of thousands of trained officers supplied by Universities, Colleges, schools, learned professions, parliaments and mercantile offices and were

drawn from all grades of society. Millions more were engaged night and day in manufacturing the machines of war, cruisers, dreadnoughts, submarines, destroyers and vessels of all kinds, aeroplanes, airships, guns, bombs, shells, motors, railways, bridges, ambulances, in the production, manufacture and distribution of food and clothing and numerous other articles and provisions of necessity. For a long time whole populations were put on rations. Tens of thousands of men and women were engaged in surgical, medical, sanitary and nursing services. The best intellects and the best energies of Europe, statesmen, diplomats, scientists, orators and writers, all the great propaganda and news agencies were unceasingly devoted to this one aim, pursuit of the war. One nation alone spent eight millions sterling a day during the war and is still spending about five millions a day in winding up the war. One's imagination staggers in trying to grasp the full magnitude of the war organizations and who would not wish that all these colossal efforts, talents and power were devoted to beneficial, humane and productive work instead of being engaged in the task of mutual destruction. The whole of mankind including the three hundred submerged millions of India would then have been raised as if by a

magician's wand to a higher plane of life and strength. The resources of this earth would have been so vastly enhanced that there would have been no more need for wars for "a place in the sun".

Need for Organizing India.

The immediate future does not seem to be at all encouraging at the present moment. The men who are in the centre of movements have been publicly saying that the position to-day is perhaps as perilous as during the war. This was perhaps inevitable, after such violent, widespread and prolonged dislocation of established conditions in all affairs of life. Signs are evident that efforts will be made to develop and organize even on a larger scale than hitherto all human and material resources at the command of each ruling nation. Great Britain naturally looks more and more to India's docile but hitherto undisciplined millions as a chief source of its strength. It will be as much in her interest as of India's that this vast human mass, now so weak; inert and helpless, should be energized and made efficient. What revolutions, ideas like Bolshevism are likely to create in Europe, no one can tell. But India which is the heart of the East will, I am sure, if timely attention is paid to the well-being of the

masses, remain impervious to such influences and it will not be a matter of surprise if talent, art and culture, perhaps even the emblems of honour and chivalry ultimately found a more congenial home in this country than elsewhere.

But without organization India will not be able to withstand the forces that have come and are coming into being, and one supreme aim of our educational systems should be to teach and train people to organize themselves and to act in co-operation. An unorganized people is a mere rabble, a helpless unsentient mass and can never be a power for good. Their natural and inevitable lot is to be poor-spirited, inefficient slaves whether of foreigners or of the aristocrats, of wealth or intellect or of caste or priestcraft or of all combined. A people that have no corporate mind or will need never aspire for status. If a system of education be not calculated to improve the people's capacity for organization and co-operation that system must be vitally defective and there should be no hesitation in discarding it.

India has not been wanting in men of great intellect and character and it must also be recognized that the general population of India are not deficient in intelligence and are noted for their

industry, thrift, sobriety and docility. But one fatal defect of character from which the people have suffered and which has been the chief source of the country's weakness and misery is the want of power of organization and of the faculty of co-operation. No one can demur to this statement: in fact I may be charged with repeating a mere truism. But there is a prevalent tendency among many leading and educated countrymen of mine to gloss over the truth, no doubt with a purpose. They do not however deceive any one but themselves and their own people; the consequence is that a vital national work of the most comprehensive significance is relegated to the background with the result that the very goal which we are so anxious to reach remains as far off as ever. Until a reasonable harmony of aim and ideal is established, nothing nationally great can possibly be achieved.

Some Notable Examples of Organized Work.

The difficulty does not lie with the people who in fact are most easily amenable to discipline and organization. But there are few among us who make serious endeavours to organize the people for useful social service on any large scale. The Servants of India Society, a bequest

of Gokhale of beloved memory, is one of the very few such indigenous efforts which have shown any stability. On the other hand, look at the numerous Christian Missionary societies; what great educational work they have been doing in India! Now, I wish to make a suggestion. Is it not possible for the State Educational Department to call to its help the voluntary missionary effort of educated men with leisure at their disposal, in spreading education by lecturing, teaching and organizing classes and schools? In other departments, such as legislation, administration of justice and municipal administration, unpaid service of citizens are being more and more gradually utilized even in India, in addition to the work entrusted to the paid official staff.

Now, either considerably more resources must be placed at the command of the State or the State must avail itself of many more voluntary agencies before it can adequately discharge its functions according to modern requirements. I think a growth in the latter direction would be more fruitful and I see no reason why this should not be achieved in an ever-increasing measure, provided the voluntary agencies are regarded as an integral and respected service of the State.

Organising Students for Corporate Life.

It should be a distinct and direct aim of the educational institutions to train students in the art and methods of organization and co-operation. One means of doing this is by paying especial attention to the promotion of corporate life and activities in schools and colleges and the University. I am also sure that the educational experts of the State will be able to devise courses of direct instruction, in this subject. I may observe that we could do with a great deal less of smartness but we want much greater capacity in the educated people for leadership and for acting in combination.

I have often felt that the full significance of liberal education is not always well grasped in this country. Nothing indeed can be more pathetic than to meet men who have received University education, unable to rise above their cramped surroundings who are afraid to think and act for themselves, whose minds are enchained to the unrecallable past, men with no adequate perception of the great forces which are shaping the destiny of the world and with no desire to adjust themselves to the changed times. To them, indeed, any change would seem to be anathema, they think that their ancestors have said the final word on every conceivable subject and that we

must recognize in all humility our infinite inferiority to those that lived in half-forgotten times. The best thing we can do, according to them, is to stick to what has been, lest we should be washed away to some strange unknown shore.

India, Past and Present.

They are like men living engulfed in the ruins of an ancient beautiful city, fascinated to the spot by the remnants of the great walls and pillars and arches covered with lichen and moss, the place overgrown with rank weeds and strewn with stagnant pools and poisonous marshes; a few roofs still intact and a few treasures peeping out of the vast debris—the inhabitants content with such meagre sustenance as can be wrung from stray clearings, while beyond lie stretched before them vast and rich continents stored with all that gives life and strength, waiting for the advent of enterprise and labour. To such men, I would say, take the treasures that are still left and carry them to the wide open health-giving virgin country and build and plant anew. But it would seem that the call of the dead is to them irresistible and they have no ear for the cries of the future generations.

I am the last person to depreciate that sentiment of love and reverence for the past which is

implanted in every healthy nature and it is but natural that we should resent with all our might, any disparagement of our country and of our ancestors as an insult to the most sacred part of our own beings. I may observe in this connection that Sir John Woodroffe rightly earned the gratitude of the people by his recent vigorous refutation of the many unjust aspersions made on India and the Indians by a foreign critic.

Need for Emancipation from Old Customs.

But it is a poor homage to one's forefathers to allow those conceptions and usages of society, which however justifiable in ancient days are in the present circumstances fraught with mischief to the common weal, to lie as a permanent barrier athwart the path of progress. No doubt emancipation from old traditions and customs though obviously harmful cannot be achieved all at once so long as the surroundings are unprepared for such social changes. But it is the sacred duty of men educated in a modern University to undertake the essential task of social reformation. One, however, looks in vain in India of the present day for any sign of a truly liberal movement. Where do we find here any body of thinkers, writers and preachers like those of Europe who by their bold,

free and earnest writings and speeches brought about those great reform movements in all departments of social life which have so considerably freed modern Europe from the trammels of blind tradition. And as it is well known it was mostly in the Universities that these momentous movements found their earliest and most eloquent exponents.

Some Recent Reform Movements.

In India, on the other hand, there has been practically only one such movement of any importance among the Hindus, the one connected with the names of Ram Mohan Roy and Iswar Chandra Vidya Sagar; and among the Mahomedans the only movement of the kind was the one led by Syed Ahmed. The first which was identified with Brahmo Samaj seems to have received a setback, while all that is left of Syed Ahmed's efforts at social regeneration is the Aligarh College. It looks as if the present-day educated leaders of society are themselves averse to any radical or important changes except in matters political. The attitude of some of them is one of utter pessimism as if the task was too much for them. I would take them at their own estimation and pass them by.

Others will tell you that they fully recognize the importance of the subject but that they are

otherwise preoccupied. It is not necessary, of course, that the same men should devote themselves to every class of communal work—in fact the work of social reformation is one of such great magnitude and difficulty in this country that it requires the undivided attention of the most gifted and earnest among the sons of the country. These problems are too serious to be solved by casual attention paid by men whose time is otherwise occupied though even small amateurish efforts may not be without some value in attracting people's attention to the problem, so long as no one imagines that this is all that is needed.

I am, however, afraid that if we probe the matter more carefully, we shall find that the most serious obstacle in the way of reforms is a certain attitude of complacency and satisfaction with the existing order of things as we have inherited it from the past. This attitude now and then finds expression in various forms and sometimes it is quite militant and violent.

Men of this temperament will tell you that our ancestors were great men, greater than the best men of the present day and therefore whatever they practised or sanctioned is good enough and cannot be improved upon. The fallacy of

such an argument is apparent and I will demonstrate it by an illustration or two. For instance, in the reign of Queen Elizabeth which by some is called the Golden Age of English History flourished England's greatest geniuses, Shakespeare and Bacon, also Raleigh, Drake and other men who showed the way of that commercial and colonial enterprise which led to the foundation of the British Empire. But I doubt if there are any sane Englishmen who would like on that account to take to sedan chairs and stage coaches in substitution for motor cars, railways and aeroplanes or to the Elizabethan ideal of social life in which the 'gentleman' devoted to ballad and sonnet-making, to duels and cock-fighting, was the only person worthy of consideration. Again there has been no greater hero in England than Nelson and few more decisive battles than that of Trafalgar. But do you think any Englishman would have considered it a sane proposition in 1914 that Britain should fight Germany with sailing boats built on the model of Nelson's "Victory"? Yet there are people who talk as if India is going to career through the twentieth and succeeding centuries with the outlook, the institutions and the equipment of two thousand years ago.

Then we are often told that the genius of the East is different from the genius of the West and sneers are levelled at those who would imitate the methods and ways of the West.

Is Imitation a Vice?

Now, is imitation really a vice to be condemned, assuming, of course, that it is of what is good and serviceable? Far from that, it is in fact a very valuable human faculty and that is why it is such an universal trait of human nature. Just as imitation is with the child a means of developing his nascent faculties so it is also with communities; for the whole history of civilization will show that imitation and adaptation have been powerful instruments of its growth. When I was a student in England 30 years ago I often heard Englishmen scoffing at the Japanese students that used then to go there in large numbers "See those little fellows, how they imitate us". Now they are looked up to as a powerful and civilized nation. When we are advised that Indians should adhere to their usages and institutions and shun those of the West, our philosopher friends or our critics seldom condescend to particulars. I should ask them, "Do you mean that we must hold on for ever to

customs such as the caste or the seclusion of women, enforced widowhood or child marriage and close our minds against all ideas and thoughts coming from the West, eschew modern arts, sciences and appliances of life and go on being content with poverty, disease and all the miseries of a crippled life, that we should adhere to our individualistic or family ideals and not strive after any larger conception of social life or civic duty?" So put, I have no doubt the answer will be a repudiation of the suggestion, for these are really fundamental matters in which there is no room for difference of opinion. If all that is meant, however, is that changes should not be over-hasty and forced but that they must be adapted to the circumstances, here again, there should be no difference of opinion.

Need for Sacrifice.

But the goal must be kept steadily in view. There should be no hesitation in taking any measures that would advance us nearer to it and we must be prepared to face inconveniences and sacrifices which are the inevitable concomitants of transition into a new order of things. Now-a-days, with rapid and world-wide intercommunications, social upheavals cannot be put off much

longer, but if the educated men and those who belong to the leading classes of society are sincerely sympathetic and earnest in uplifting the masses and they take wise and timely measures for filling the gulfs that divide one class, sect or caste from another and if the economic and social problems are solved by a genuine brotherly sympathy and love, then India may accomplish her social evolution without such convulsions born of hatred as are now causing so much anxiety in Europe. The whole world is on the brink of a cyclic change and if our educated men are far-sighted, they will, instead of trying to dam the current with piles of mud and sticks, dig ample channels through which the energy can be utilized for making human society richer and better. They must adopt as the motto of their lives the true social maxim that this life must be made more and more worth living for all classes and conditions of men. Nay, all artificial barriers must in time be removed so that the age of that brotherhood and equality of man, which all great founders of religion dreamt of, may be brought nearer by a few degrees.

Calcutta University Report.

A very notable event of the education calendar has been the publication of the report of the

Calcutta University Commission. So far as I have been able to go through it, I have found it most interesting and instructive and I have not the least doubt that the authorities of this University and the Mysore Education Department will find in those five volumes considerable matter for very careful consideration and many illuminating suggestions. As I am not an educationist, I will not attempt any criticism of the various proposals, but, generally speaking, I am in agreement with the main outlines of their scheme. I wish only to make some general observations which, I hope, will not be quite out of place. To start with, the Commissioners have rendered a great service to the country by pointing out in such a clear and convincing manner supported by a strong array of authorities that the whole system of Indian education has to be recast so as to keep it abreast of the ideals and requirements of the times. Its different divisions, such as elementary, secondary and University education, must be co-ordinated with each other as far as possible, but at the same time each must have a distinct purpose in view. In the present circumstances, elementary education in India would fail of its object unless the training of the pupil in the industry pursued by his parents or

some other suitable art or craft, formed its integral part. And I must strongly urge that there should be a well-thought-out and comprehensive method, supported by a generous system of scholarships and stipends, for selecting distinctly promising boys from the elementary grade for the secondary schools. A proper and adequate system of scholarships, in my opinion, should indeed be in the forefront of the educational programme throughout. This, I am glad to find, is fully recognized by the Mysore Government.

Importance of Secondary Education.

As for secondary education, that must be regarded as the backbone of every educational system. Its aim should be to make of those who have been through its full course cultured, resourceful and patriotic citizens of the State, useful to themselves and to society. A student who has completed his education in a secondary school should be fit to receive training for the different professions such as law, medicine, engineering and for mercantile and industrial business and the management of concerns like zamindaries. The course should be so framed as to occupy the average student till his eighteenth year. Here I may incidentally draw

attention to one important question, whether there should be any minimum age at all for the grant of a certificate of completion of the secondary course or, if there is to be one, whether power of exemption should not be reserved for the benefit of boys of more than average ability. It seems to me that a hard and fast rule by which the most talented youths are kept back—may be for one or two crucial years—is mischievous and wholly indefensible. One point I wish particularly to emphasize before you—the supreme importance of which is so repeatedly recognized by the Commission, namely, the necessity for an adequate supply of efficient teachers without which no system of education, however well devised, has any chance of success. It is a most deplorable fact that the value of men into whose hands is entrusted the training of the future generation, should so often be assessed at starvation wages, in the lower grades even inferior to those of factory and mill hands and in no case sufficient to attract men of the best intellect and character in the country. The educational service should be at least as well paid as any other service and it should be assured as an honoured status. Then too much care cannot be bestowed on the selection of both the teaching and the administration

staff. They must be men not only well educated and proficient in the subjects entrusted to them but men of sympathetic imagination who can at the same time enforce discipline, men who regard teaching as a noble profession or rather as a mission and who understand and are in full sympathy with the ideals and requirements of the country and with the ambitions of the students.

Medium of Instruction.

Another most important question in connection with secondary education is whether English or the Vernacular should be the medium of teaching. My opinion on the point is set out in full in the Commissioners' Report and all that I would say now is that I adhere to it as a statement of principle. The vernaculars of the country are unfortunately too numerous and it is my own belief that not one of them is yet fitted to be the medium of higher instruction. If there be any vernacular which possesses a sufficiently educative literature, my objection does not apply to it, but at the same time there must always be a school in every secondary educational division with English as the medium of instruction so as to allow of a choice. In deciding upon this question, every care should be taken not to sacrifice

the interests of sound education for the sake merely of sentiment, however laudable. Besides I confess to you that I am one of those dreamers who look forward to the time when there will be one common language for the whole of India and even if the language which has the best chance in this respect be not one of indigenous growth, such as English, I would be prepared to accept it, and readily sacrifice some very dear predilections of my own, in the best interests of the generations to come. I may also point out here that the languages of our religions and the classics are not any spoken vernaculars but either dead or foreign languages. For all boys to have to learn a number of languages when education can well be imparted and useful practical knowledge absorbed through the medium of one, is a woeful waste of energy and time, which must ultimately be obviated. It is often asserted that English can never form a proper medium of highest expression for an Indian. This is, however, contrary to patent facts. For instance, could highly abstruse philosophical and entrancingly beautiful poetic thoughts and emotions be more charmingly and at the same time accurately expressed than they have been by Rabindranath Tagore in the English language, though some

of his writings are called translations? Thousands of educated Indians all over India use English as the easiest channel of communication and is it not also a fact that English, especially in the South, is rapidly gaining ground among sections at least of the labouring classes, such as skilled workmen and domestic servants, with advantage to themselves and their employers? In educated families now-a-days most children are in fact bi-lingual. These are facts which have to be taken into account in dealing with the question.

Primary Objects of a University.

The University, as I understand it, should have two objects in view, imparting a high order of general education and culture and also professional training founded on the work already done in the school, and for students of more than average calibre and scholastic proclivities, the University should provide facilities for the acquisition of highest learning in every branch of knowledge and for training the student for scientific or literary research. If any University is to be a centre of learning and research in this sense, two things are essential; it must, at any cost, secure the services of at least a few savants and

scholars of high attainments and recognized status, and it must be generously equipped with ample and well-organized libraries and laboratories. The value of a good library is, I am afraid, not sufficiently realized in this country. It must be borne in mind that it is the thoughts of the great men of genius as enshrined in the books that are the real instruments of education and the ordinary living teachers can only help and guide the students in assimilating their ideas and in absorbing those sublime and beautiful sentiments and emotions which the best spirits of different ages and countries have expressed in immortal words. A further ideal which should be directly kept in view is that the graduates of the University should be fitted to be leaders of men, with their intellect, will and body efficiently trained for the task. With this end in view, emphasis is rightly laid on the importance of promoting a corporate University life, the tutors being in personal touch with the undergraduates as sympathetic but not too obtrusive guides.

Education of Girls.

I am also in complete agreement with the opinion of the Commission that education of the girls should receive at least as much attention

as that of the boys, and I believe it to be strictly accurate to say that educated women would help to spread education and culture in the future generations and in the general community more rapidly and effectively than twice the number of educated men. In fact I believe that once education has captured the seclusion of the Indian ladies, no further propaganda work will be needed and the capacity of succeeding generations for all good work will be immensely improved. I do not know of another more potent cause of the degeneration of the country than the customs prevalent in India especially among the Mahomedans, by reason of which women lose all chances of development in free and natural ways.

Contributions to the University.

I have not the least doubt that the citizens of this State are proud to have a University of their own. May I not also assume that every one will consider it to be his duty to make such contributions as he is capable of towards its advancement? The rich men of Mysore, the noblemen, the landowners, the merchants, the bankers and the prosperous lawyers and traders will, I earnestly hope, rejoice in having an object, worthier than which there is none, on

which to lavish their wealth and treasures. It would indeed be a matter of surprise and disappointment to all—may I say from His Highness the Maharaja down to an interested visitor—if the Mysore University is not richly and abundantly endowed by the munificence of the wealthy sons of the State.

Equal Opportunities to All.

There is one matter of Mysore Educational policy—apparently an integral part of the general policy of the State—to which I wish to refer for one moment without entering upon an arena which lies outside my jurisdiction. I mean the effort that is being made to give equal chance of education to all communities and castes and not to allow the educational opportunities offered by the State to be monopolized by the most active and the forward. Where a State is asked to play the rôle of a guardian of the people and not that of a mere watchful policeman, it has to take as much care of the slow and the backward among its wards as of the more vigorous and pushing ones, if not more. At the same time the State would itself be a heavy loser if it failed to encourage intrinsic worth or talent simply because it happens to be more common in one community rather than in

another. If I may be permitted to say so, the attitude of His Highness the Maharaja has, in this respect, been inspired by the highest wisdom and is worthy of imitation by other rulers. I also take this opportunity to express on behalf of the Mahomedans of this State—with whose sentiments I may claim to be fairly familiar—their sense of grateful appreciation of the anxiety of His Highness and his Government to help them to win for themselves a position in which by their steadfast loyalty and devotion they can render services of value to the State.

Exhortation to Students.

Graduates of the Mysore University, I now wish to offer you my warmest congratulations on the successful termination of your academic career which has just been crowned by the award of Degrees and Diplomas in this distinguished and brilliant assembly. May the memory of this eventful day long inspire you in discharging honourably and with credit the responsible duties in relation to the State, the society and yourselves which appertain to the position of a graduate of this University. As I have tried to indicate in all that I have said, the primary object of the State in instituting higher education is to produce

a body of men who, by their trained intellect and moral character, by their knowledge and liberal ideas, will be of service to the State in helping the people along the highway of steady progress, enlightenment and prosperity. Do not misunderstand me. I do not mean for one moment to suggest that the State has educated you in order to employ you in certain paid official appointments. That, as you know, is not so; the paid agencies of the State are necessarily limited in number, but the State has an undeniable claim upon your services for the behoof of the people in many ways other than by employment in official departments. The mass of work that is to be done in this way is very large in almost all directions of communal life, some of which I have already indicated. What is expected of you is not that you should devote all your time to this work but that you should always remember that it is as much your duty to render some direct service to the society as to earn your own living. You must think and act not only for your own selves or your families but for the future generations of the people. How much time and thought should be devoted to one kind of work or to another is a matter of detailed adjustment to be determined by each individual with

reference to his personal circumstances and the nature of social service which he is most fitted to undertake. All this may sound somewhat severe advice, but if you stretch your vision but a little into the future, and if all your care and concern be not for your immediate personal ease, you will no doubt realize that, by helping the State in its beneficial activities and by ameliorating the condition of the people around you, you will be making the lives of your children and grandchildren and perhaps your own far more comfortable and happy than if you earned twice the income for the time being. Besides, to a truly educated man, can there be a purer and a greater source of happiness than the service of his State and the people? Take it from me that at least before the war conditions supervened a man could live in Europe more comfortably, a more healthy and a fuller life with, say an income of Rs. 100 a month, than in India. Why, because there is in Europe far more of corporate effort and organization and therefore the strain on each individual is much less. For instance, locomotion in London with its innumerable tubes, railways, buses and tramways and taxis is far cheaper and easier than in Bangalore, Madras, Bombay or Calcutta or in any other city in India. Then

there is very little scope here for large mansions or hotels where a number of people can live together in well-appointed rooms served by a common service. In fact the habits and ways of the people and the existing social arrangements are not economically suitable for a comfortable healthy standard of living for persons of small incomes. Then look at the condition of the poor and all that it signifies in appalling mortality, steady decline of vitality, the spread of famine and pestilence. Is it difficult for you to realize that the country has reached a critical stage and that you must change your outlook and your methods, get rid of as many obsolete notions as possible, and as fast as you can, set about organizing society for all the various kinds of necessary communal work, such as industrial development, education, social reformation and sanitation?

A Piece of Practical Advice.

One piece of practical advice I should like to give you. Start on your life with as little personal and domestic burden on your shoulders as possible. You will then find that your earning capacity will greatly increase and you will at the same time be in a more favourable position to render valuable service to the State. Keep

your breasts always filled with courage and faith, hold up your heads in whatever position you are placed. Look upon honest work of every kind as equally worthy of the greatest and the lowest and never scruple to brush aside whatever artificial obstacles you may find in the way of any work which your conscience tells you is for the good of humanity. Remember always that the highest mission in life is to serve one's fellow-beings. I wish you every good fortune in your future career.

Sir Leslie Creery Miller, Kt., C.B.E.

Address delivered at the Convocation of the University of Mysore on 1st November 1920 by Sir Leslie Creery Miller, Kt., C.B.E., Vice-Chancellor.

YOUR HIGHNESS, LADIES AND GENTLEMEN,

At this the Third Convocation since the birth of the University of Mysore I occupy a double position. I am as Vice-Chancellor expected, I understand, to tell you something about the doings of the University in the past year and I am also 'a member of the Senate or other person nominated by the Chancellor to deliver an address suitable to the occasion'. Combining these two capacities I combine also the two discourses and thereby hope to save for you some of your doubtless very valuable time and to reduce to some extent the strain upon your attention.

I shall not attempt to emulate the moving eloquence of either of my predecessors in this position, nor can I pretend to offer you anything that is new. I shall endeavour to be severely practical, and I shall indent on my predecessors for my texts. I shall by no means expatiate free over all the range of educational ideals, projects and problems, a mighty maze of which I cannot pretend to have devised or even to possess a plan.

I should have liked, had time permitted, to have made an attempt with the help of the charts supplied by my two predecessors, to measure to some extent the progress we have made in the short time that has elapsed since we put to sea. But as it is, two points and two only do I propose to emphasize: one I shall put before the people of Mysore and the other I shall, on behalf of that people, present to my young friends the new graduates of the Mysore University. But of these a little later.

In the latter part of the past academical year the shadow of mourning has darkened the University. The death of the First Vice-Chancellor has deprived her of a very faithful friend—who sat by her cradle a zealous, loving nurse; and helped to guide her infant footsteps on her appointed path—a genial, kindly gentleman. In the deliberations of the Council we greatly miss his gentle guidance, and his complete knowledge of the details of all the subjects that came before us.

He has bequeathed to the University two tokens of his good-will: a prize to be competed for by men and a prize to be competed for by women, tokens which amid many other things will serve to keep his memory green when

all of us who knew him and who mourn his loss, shall have followed him.

Another zealous friend Mr. Thomas Denham has left us but happily still lives to watch with interest and sympathy our efforts and our successes: and doubtless to lend us, if need be, a helping hand from time to time.

I have not much to say about the year's events. Our students have increased in number by some 100 men and in the present year which commenced on the 1st of last July we have been faced with the problem of finding places for more candidates than we can easily accommodate. When our young men are urged to turn to the study of science and technical knowledge it is incumbent upon us to provide for those who accept the invitation: and how to do this is one of the questions which require solution early.

But if young men are clamouring at our doors that is not the case with young women. For them we are still waiting. It may be that we are at fault: that we do not provide sufficiently varied 'attractions' if I may so phrase it: that we ought to increase the number of the courses of study: that is obviously a matter mainly of expense. The problem from this

point of view is to provide the necessary attractions at the minimum cost. It is not insoluble, I dare say, but I am not attempting to propound the best solution, for one thing because it is clear to me that even with the restricted curriculum at present available to students of the Maharani's College, there ought to be in that College a far greater number of students than at present there are—I do not seek to fix the blame for that, but I am sure the University cannot be held to be mainly, if at all, in fault.

Our endowments are steadily if slowly increasing: in the past year some Rs. 4,500 have been added to the total, and since then two other gifts have been offered, one of Rs. 1,000 by a gentleman of Saklespur for a medal, and one of Rs. 5,000 by Mr. P. Raghavendra Rao also for medals in memory of his father, Mr. P. Krishna Rao. These await only formal acceptance and final settlement of the conditions of award. For all these contributions the University cannot be too grateful.

I believe I am fully justified in saying that throughout the year the Government, the Senate and the Council have done all that seemed to them possible to help the University on the path of progress on which it has so recently started;

but over all this endeavour has hung the cloud of poverty. "Postponed for lack of funds" has seemed to me, since I was asked to do the duty of Vice-Chancellor, to be the fate of all or nearly all the schemes suggested for expansion and development. Bid me not revive the *infandum dolorem* of those disappointed efforts of ours. Are they not written in the records of our Senate and Council meetings and the proceedings of the Government in the Departments of Education and Agriculture? There let them lie till times are more propitious. A kindly pat on the back by Sir Michael Sadler and some of his learned colleagues has assured us that our start has been good, that our constitution is framed on the approved lines; and my successor and the Council have now to consider with the help of an analysis full of suggestion made for them by Mr. Denham, the report of Sir Michael Sadler's Commission so far as it presents features, ideas, methods which may be found suitable for adoption here. It is probable, nay certain, that some changes may be found desirable and naturally we shall be found to have made some miscalculations. I do not myself believe that any change which the new Vice-Chancellor and the Council will be able to suggest will render

the administration less expensive, and it follows that so long as 'financial stringency' is with us we shall be hard put to it to do any of the many things which even now seem to us desirable.

The process of cutting our coat according to our cloth is simple enough and satisfactory enough if the material is plentiful; it becomes a difficult and somewhat disheartening task when the supplies of the cloth are insufficient to meet our demands: our aim is to turn out a really useful, comfortable and reasonably fashionable garment with all the newest improvements and adornments; and I do not doubt that even with the material now at our disposal we shall, given plenty of time, achieve a very creditable result, but if we are to be delayed till the period of financial stringency shall have waxed and waned and disappeared, our progress is likely to be very much slower than we or most of our well-wishers desire.

On the one hand we have eager insistent voices, anxious and rightly anxious to provide for the youth of Mysore of both sexes, the opportunity of studying in their own University all the branches of knowledge which they desire to acquire; one urging us to furnish our coat with an agricultural swallow-tail, another insisting on a medical cape, others suggesting full legal pockets

or a musical and artistic collar and cuffs, and beside all these, we have still in our ears the voice of Sir Asutosh Mookerjee bidding us "Forget not that education is the one object for which no people has ever yet paid too much."

On the other hand we have the Government holding in trust for the people the moneys gathered mainly from the people, bidding us be patient, handing out to us such quantity of material as they believe they can rightly spare for us, and bidding us make the best of it. "We know," they will tell us, "that education is the most important, as it is also the most importunate, of the departments over which our funds are to be distributed, and we may accept Sir Asutosh Mookerjee's statement that if the history of civilization be explored it will be found that 'The people who provided the greatest educational opportunities were always the most wealthy, the most powerful, the most respected, the most secure in the enjoyment of every right of person and property.' We observe, however, that he speaks of 'peoples' not of 'Governments' and we should like some of those who have accepted his invitation to explore the history of civilization to inform us whether the proportion of the revenues expended on the provision of educational facilities by the

Governments of those 'peoples' was greater than the proportion spent by us to-day." "We recognize," they may say, "that if ever the time comes when our weapons can be cast away or beaten into plough shares and pruning hooks that time will come through the spreading of knowledge, and we recognize that in the spreading of knowledge, the University is one of the most important and effective agents which we can employ, but the time is not yet, when our policemen can be beaten into school-masters, our magistrates and judges turned into professors, our courts and our jails 'scrapped' or converted into libraries and lecture halls. For the present, you must be content to take your share of the revenues and that share shall be as great as we can make it with due regard to the requirements of our other necessary if less important services." That is reasonable enough, right enough. But the result is that the University fails to obtain the necessary subsistence. So far from being able to expand, so far from being able to inaugurate more courses of study in new branches of learning, or higher courses of study in those already taught, we find ourselves unable solely from lack of money to do all that ought to be done to provide for the courses which already are set out in our Calendar. I

have already referred to one or two facts which show how we are situated. Our students have increased in number by about 100, and in July last for 40 seats in the Engineering College there were 180 candidates—some from outside the State of Mysore—and it was, I think, in the month of July last that one of my colleagues and I leaving the court at about half-past two in the afternoon to enjoy a brief half hour of doubtless well-earned rest, were to our surprise escorted through the corridors by a numerous band of young men, obviously students. It was not the pattern of our gowns they came out for to study: it was not the silvery gleam of the maces borne before us that attracted their cupidity: they were simply a number of honest lads who had qualified themselves for admission to the University and were come to ask the Vice-Chancellor to help them to obtain seats in the Central College—where there was no room for them. What help was possible had in fact already been given by others. The Principal of the College had already made the best possible arrangements for the applicants and the Government readily sanctioned the necessary expenditure. So far so good, but these things are a warning. If we are likely to find increasing difficulty in providing for the accommodation

of would-be University students what becomes of the proposition, put forward two years ago as axiomatic "All sources of knowledge must be open to all students as they want them"? If the people of Mysore intend to accept this proposition, if they mean to make their University self-contained, if they desire that the young men and women of this country shall be independent of its 'recognition' by other Universities, for their higher and more specialized post-graduate studies—then they must recognize that there is only one key which can effectually lay open the sources of knowledge and that key is a key of gold; and they must make up their minds to help in the making of that key. For it has to be remembered that every student entering our halls is a source of expense no less than of pride to us. We cannot increase the number or the strength of our classes without increasing the staff of our teachers; it may be that a pleasant path in a shady grove may suffice as a lecture hall for the inspired exponents of philosophical systems; a plalform under a pipal tree may do for the students of history; but for those who seek to study science under modern conditions there is more to be done; delicate and costly apparatus, specially designed and constructed lecture rooms and

laboratories, all have to be provided in sufficient quantity, and none can be provided without a large expenditure. What then are the people of Mysore going to do about it? I turn to the report of the address given at the Convocation of last year by my friend and some time colleague, Sir Abdur Rahim. What does he say about it? "I have not the least doubt that the citizens of this State are proud to have a University of their own. May I not also assume that every one will consider it to be his duty to make such contribution as he is capable of, towards its advancement? The rich men of Mysore ..... will, I earnestly hope, rejoice in having an object, worthier than which there is none, on which to lavish their wealth and treasures. It would be a matter of surprise and disappointment to all if the Mysore University is not richly and abundantly endowed by the munificence of the wealthy sons of the State."

I am afraid our friend, if he has been watching us with the sympathy indicated in his address, must by this time be somewhat surprised and somewhat disappointed. Not that we are ungrateful for the gifts that have been made to us; far from it, but they, so far, are gifts for the provision of rewards to students, very valuable

to the University, but not quite what Sir Abdur Rahim meant, I think, by endowment. It may be, I think it is, likely, that he somewhat over-estimated the number and perhaps the resources of the wealthy sons of the State. There are probably few whose wealth could enable them to make large contributions to the University: contributions such as the recent gift of £165,000 (say 16 lakhs of rupees) for a school of Biochemistry at the University of Cambridge, may make our mouths water but we do not at present expect a superabundant supply of them from individual citizens of Mysore.

But if the citizens of Mysore are really proud of having a University of their own, if they really desire and really mean to establish it firmly on solid foundations with the least possible delay, can they not call in aid of their determination that spirit of co-operation of which so much is heard in these days? What one man cannot do by individual effort, many may accomplish by united endeavour.

Surely it is not necessary to label each gift with the name and style and address of some individual donor. Can our citizens not sink their individuality in their corporate capacity? Is it not possible for a number of citizens representing

some locality, or less desirably, some community, to combine in contributing an endowment? Can we not hope to see, let me say, a Senate House, presented by the citizens of Mysore City or of Mysore District? Why should we not have a chair of what you will, be it Biology, or Geology, or History, or Philosophy, or Sanskrit, founded and endowed by the citizens of Shimoga? A Tumkur professor of this, a Kolar professor of that, a Chitaldrug professor of the other? Let but our Cities, Districts, Taluks, Hoblis and what not, vie with one another in bringing gifts for the maintenance and expansion of the young University, which if all be true that is said, they were so eager to establish, and soon we shall feel that we stand firmly on our feet and may venture to increase the length of our stride. Our University is now as all of you know, not a State-aided but a State-maintained institution: it is, I venture to think, too much dependent on the fluctuations of the public revenues and the requirements of other schemes and projects from year to year. I do not for a moment doubt the good-will of the Government. I do not for a moment question its generosity, I do not hope or indeed wish to free the University entirely from Government control or to make it entirely

self-supporting without aid from the State. I believe that it is now well established, and I give no heed to the critics who even now from time to time suggest that it is still a costly experiment, liable to be 'scrapped' if I may so express it, at short notice: I believe that it will grow and is growing in strength and in health, and that it will abundantly repay the State and people of Mysore the labour and the sacrifices they have made to establish and to nourish it, but I believe that it will grow and ripen the better for a greater financial stability, greater financial scope for development, and I see in the gifts of the people the most promising and the best method of hastening the day of harvest. The method at present most in vogue with the citizens, that of belabouring the shoulders of authority with the bludgeon of importunity, is a method which has its uses and achieves results, but it requires in my view to be supplemented, if not supplanted, by the method I have suggested, whereby the people themselves put the hand of assistance to the plough of endeavour. Thus will they manifest their real interest in their University and go far to ensure the increase in the future of the prosperity and happiness of their country.

If I have wearied you with so long and so 'materialistic' a discourse, it is because I have felt that this is the best opportunity I am likely to get of emphasizing a matter of very great importance to the future of the University: and because it seems to me necessary to keep in view the materialistic side of our educational problem, for it is perhaps likely to be a little eclipsed and obscured by other more attractive aspects of it.

Now, I turn to the matter which is the proper subject of the discourse suitable to the occasion which it is my duty to deliver, a word or two to you who have to-day received degrees in this hall and I ask you what are you going to do for Mysore—what are you going to do to repay your country and your families for the sacrifices made for you, for the education already given to you and for the education which will, I hope, be given to many of you hereafter, in this University or elsewhere. If the question occurs to you what is the profession in which a young man with a University degree can best serve Mysore at present, I believe that if you give yourselves an honest and sincere answer, that answer will be 'the profession of a teacher'. Everywhere we hear of the need of education—a few days ago at

the opening of the Assembly, I heard the representative of an association of members of what are known as the "depressed" classes deliver a short and interesting address to the Dewan. "What my people want of the Government," said he, "is education"; and there are few, if any, communities in Mysore of whom the same thing cannot be said. Well, if that is the universal want, are you going to help to supply it?

The University will open next year a post-graduate course for a degree in Teaching, and the Government is even now, I believe, considering a comprehensive memorandum on education and may soon enunciate a suitable and, I trust, a liberal policy. What that policy may be, I do not know; but I can hardly imagine any enlightened modern policy of education which does not involve the creation or extension of that "Net-work of well-organized schools" of which Sir Asutosh Mookerjee spoke two years ago—and each school of that net-work of well-organized schools requires a staff of skilled, trained and competent teachers. So, I venture to think you will not have any lack of opportunities of obtaining employment as teachers, and there is, I believe, we have agreed, no occupation which affords greater opportunities of doing great and

noble work for Mysore. But you will naturally ask how far the adoption of the teaching profession is likely to yield you sufficient fruit. The work may be great, the work may be noble, it will certainly be taxing. Will my reward be as great? Will my prospects be as noble? May I expect adequate compensation for my toil?

Well, for some years now it has, I think, been recognized that the occupation of a teacher is economically productive like that of the engineer and unlike those of the lawyer and the soldier, which in their essence are but necessary evils originating in the unwisdom of the human race—and we have heard from all parts of the world, voices, powerful, eminent, wise, voices, insisting on the necessity of attracting to the service of education by the offer of adequate rewards, the best equipped minds and brains, not to say hearts, to be found among the young men and women of the country, if that country is to keep pace with others in prosperity and general well-being.

I do not doubt that the Government of Mysore accept the soundness of the proposition so insistently urged, and it seems to me probable that in a few years' time the educational services of the State will present as many attractions to

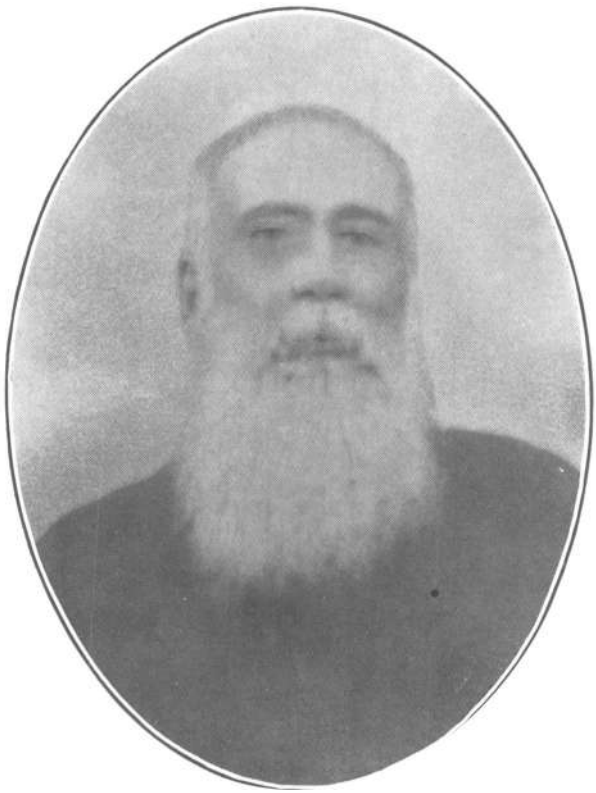
its members as any branch of the administration, and at least equal opportunities for rising to the highest positions and that not only in their own profession but also in the councils of the State.

But if you think that this prophetic outline is possibly painted in colours somewhat over-bright, then will you consider one other aspect of this matter? Do not we hear all round us the hymns of praise raised to the spirit of service, the spirit of sacrifice? Writers and teachers, lecturers and preachers, join without ceasing in exhorting and adjuring us to turn from our old faiths, to leave the multitude who throng the altars of the spirit of self-help, and join the small band of men and women who through the ages have paid their vows and brought their offerings to the altar of the spirit of service: the few who have been worshippers of that spirit not only with their lips but in their lives. "Trust no more," they tell us, "to the old dogma 'God helps those who help themselves'—dogma born of the age-long cruel struggle for life. 'God helps those who help others' is nearer to the truth. Be not over-busy about your own needs whether material or spiritual. Be not over-anxious about your own wealth, your own ambitions, your own comforts, your own souls: seek ye first

the service of others, and all these things shall be added unto you." Surely a grand doctrine, if a hard one.

In all this, of course, there is nothing new; for ages the doctrine of sacrifice has been preached by teachers of different religious and philosophical systems, preached it is true, but practised by few of the preachers and few indeed of their hearers. The struggle for life has held the field for long. Is the time coming when it is beginning to yield? Many will tell you "Yes. The spirit of service is moving the peoples of to-day and will spread its influence surely if slowly till the world is filled with its blessings." I hope that may be so, but the point now is this: if you are at all imbued or even slightly tinged with this spirit of service it should not surely be a very hard thing to live up to it, so to speak, to the extent which I am now suggesting. Even if by the adoption of teaching as a profession you cannot hope to attain as great wealth, as great worldly position, as great fame, as can be reached in other professions, other occupations, still you will not starve, your families will not lack food, clothing or shelter, you will not have to beg your bread; can you give up some hope of greater worldly advancement for yourselves,

to bring to the service of your fellow-countrymen those talents which you have been able, with their aid, to develop? Can you live for the good that you can do rather than for the goods that you can get? It is no small thing to bring light to them that sit in darkness. There are many ways of doing it, no doubt, and I have suggested to you but one and perhaps a very obvious one. It is at your choice. If you can see a better way take it, if not, give mine, I pray you, your earnest consideration. Your University will watch your choice with sympathy and interest and whatever that choice be, I trust that in the fulness of time it will bring to you your hearts' desire.



Sir Brajendranath Seal, Kt., M.A., Ph.D.

Address delivered at the Convocation of the University of Mysore on the 14th October 1921 by Dr. Brajendranath Seal, M.A., Ph.D., Vice-Chancellor.

YOUR HIGHNESSES, LADIES AND GENTLEMEN,

By the command of Your Highness, the task of delivering the address to this Convocation has devolved on the Vice-Chancellor of the University. It is an honour and a privilege for which I am deeply grateful, but mingled feelings of awe and humility, and a chastened sense of the solemnity of this grave academic function weigh down any formal or customary expression of that gratitude. For there are conventions which are greater than conventionality, and to-day's function is such a Convention of the world of learning and letters. One, who has grown grey in a service which has been to him a religious ministration, joins with head bowed low and heart on high as at an altar of thanksgiving and praise! *Sursum Corda!*

As Vice-Chancellor of the University it is my first and most humble duty to welcome the distinguished assembly before me to this great annual ceremonial, the Durbar of Learning, which has a ritual and symbolism, a pomp and paraphernalia of its own, consecrated by the traditions of ages and the customs of peoples. And if I

feel invisible presences in this assembly mingling with the visible, if I seem to see hovering overhead in this Hall of Convocation a cloud of witnesses, in which hoary figures from Aryavarta and Kumarika, from the Vindhyas and the Sahyadris, from Ashramas and Viharas and Sanghas, from the forest or the cloistral Universities of Ancient India, mingle with flitting shades from mediæval Vijayanagar, lifting white hands to bless those who are enrolled to-day as Initiates and Novices in the Temple of Learning, it is not a fond illusion of fancy, nor an unsubstantial vision conjured up by the historic imagination. It is literally a phantasm of the Past, a resurrected Image. For, indeed, it is with the historic memory of a race as it is with the organic memory of the plant: the records of the undying past are treasured in the subterranean storehouse of the group-soul of a folk or race even as the organic responses of ancestral generations are locked up in the sea-moss (and the sea-anemone) buried six thousand fathoms deep in the bed of the ocean. And these lapsed memories and faded records flit back to life and rekindle into luminiscence when the cycle of the revolving years brings back the season and the hour. It is thus that generation calls unto generation, and

the procession of History deploys itself before us again.

Beginnings of English Education in Mysore.

And not ancient History alone. The history of modern education in Mysore has also left an abiding mark on this pioneer University in an Indian State. Two years before Lord William Bentinck's resolution on Macaulay's minute set the seal on the New Learning in a land of old-world lore and mediæval science, His Highness the Maharaja Sri Krishnaraja Wodeyar III introduced English in the capital city of his State as the vehicle of the new knowledge from the West, and the pioneer institution thus founded in an hour of destiny was known as the Raja's Free School. And the funds of the new education came entirely out of His Highness' Privy Purse including the supply of books to the adventurous band of students, the Pilgrim Fathers of Mysore voyaging to an unknown shore. That Free School is a landmark in the history of Mysore.

So early, and under such auspices, it was that Mysore began the race, and her zeal for State-maintained and State-aided education never flagged during the long arduous uphill climb which has brought her to the top of the mountain

from which she can now contemplate, if she will, the fair vista of a Promised Land.

Education in Pre-British India.

Even so does Mysore worthily continue the old Indian tradition. For in Hindu India, from time immemorial, the State (and the nobility) had maintained Ashramas and Viharas, or provided Chatuspathis (of the Quadrivia), for the Higher Learning, and the village communities made communal provision by grant of Vritti for the Mahajani Schools (or practical mass education). The net educational result, so late as only two or three decades before the Maharaja's Free School, had been a free and wide-spread education, primary, secondary as well as higher, in indigenous India, for a parallel to which, in the Middle Ages or earlier, we must go farther east, in fact to China, Burma and other Buddhist countries, in which village schools were conducted by monastic brotherhoods, or in which the State organized the administrative ranks on the basis of a competitive examination in the national classics, classics which, like our own Mahabharata, were at once vademecums of administration, encyclopædias of useful knowledge, and store-houses of heroic legends.

Even in that dark first decade of the 19th century, darkest India showed a fairly illumined

chart of literacy, witness the census of 1813, witness also Munro's minute on indigenous education and Elphinstone's on the Dakshini grants of the Peshwas. Not less than 30 per cent of the boys were at school, and not less than 1 in 600 or thereabouts (as compared with Scotland's proud score of 1 in 500 twenty-five years ago) were receiving in the tols and muktabs an advanced instruction in Grammar, Rhetoric and Belles Lettres, in Logic, Law or Astronomy, in Therapeutics and Medicine, roughly corresponding to the University grade in our days. But when the New Learning from the West installed itself, the gentry and the priestly classes disdained to pay court, and the figures show with great probability that of every hundred who had devoted themselves to the Higher Learning in Pre-British India, only 16 had taken themselves to the New Learning by the end of the 19th century, *i.e.*, till so late as two decades ago, and the residue had diminished by 36 per cent. The total number of persons engaged in advanced studies had been actually diminished by a third. It is only since the advent of the new movements of the Teaching University and of the smaller regional University in contemporary India, of which Mysore is a pioneer and scout, that our generation is

beginning to push on to the point (and beyond the point) at which mediæval India had carried us before.

The New Learning and the Old :—Loss of Literacy..

The history of Modern Education in India began, then, in a conflict between the Old Learning and the New. It was Macaulay's zeal for useful, practical and scientific knowledge that brought on Lord William Bentinck's Resolution of March 1835 which decided in favour of English education to the entire neglect, alike, of oriental learning and vernacular mass education. This violent breach of continuity had, as we have seen, one undesirable result: there was a great loss of literacy in the country for several generations. For the old tols and muktabs and the old village or communal schools had been adjusted to the old socio-economic order, but under the new regime the social adjustment of educational values and educational organizations was upset,—with a resulting loss of literacy, both the higher and the lower literacy, in alarming proportions, which continued for generations, and is being only now recouped.

As I have pointed out elsewhere, the blunder was natural at the outset. Not only in the educational policy, but also in land tenure and revenue

administration, and even in the sphere of civil polity and law, it was the reforming zeal of the abstract doctrinaire, not of the far-seeing and fore-seeing statesman, that prevailed. Sir Henry Maine, Sir Alfred Lyall, and other students of Indian Sociology have commented on the blunder of rashly destroying ancient institutions and overturning the indigenous principles of socio-legal and administrative polity. Indeed, Sir Henry Maine brought about a healthy re-action in the sphere of civic polity and law. But there has been no Sir Henry Maine in the British educational administration to preserve and foster the inherited cultures and humanities of the people, and what is more vital still, to divert their indigenous passion for learning, the old Eastern instinct of disinterested knowledge, to the channels of modern thought and science.

Thus it was that the modern Indian Universities in their ideals and organization cared little for placing themselves *en rapport* with the indigenous ways and tendencies of thought, or the inherited cultures and humanities of the Indian peoples. It was the business of the Universities to engraft modern scientific thought and criticism and modern social aims and ideals on the old stock of Hindu or Islamic culture, but

they chose to begin as if the Indian national record were a *tabula rasa*. But no Indian University can become a national institution, if it ignores the literary, the æsthetic, or the philosophical heritage of the Indian peoples, whether Hindu or Mahomedan. All this has brought about a curious predicament: the University-educated Indian lives in two different worlds in the home and on the public platform, but is really at home in neither. Accordingly, Vidya (*Scientia*) has not been justified of her children. Knowledge has failed to be socialized, and to bear its proper fruit in freedom and the joy of life, or in the disinterested joys of creation and self-giving out of the fulness within.

Need of Historic Continuity.

Indeed, the transition from the mediæval to the modern was on the whole gradual and continuous in Europe; at any rate it was a process of growth from within. In India, there has been a violent disruption, a breach of continuity in the national life and consciousness which has made genuine thinking rare if not impossible. We think in counters and symbols, in meaningless abstractions and second-hand formulæ, and are cut off from those original experiences of life and Nature which are the only springs of scientific or philosophic thought.

Historic continuity, then, in the national life and consciousness cannot be broken with impunity. At the same time the nation must outgrow its old wrappages and swaddling clothes. Leaving the Ashramas of the Rishis, and the Viharas and Chatuspathis of the Scholiasts, the Genius of the Nation must come out into the cosmopolitan arena of modern life and interests. The problem before us is to adapt the highest Hindu (or Mahomedan) thought or spirituality to modern ideals of life and the universe, a problem which can be attempted only by minds familiar with the types and forms of culture in the East as well as the West, and able to survey from the philosophic height of Universal History, as from an Eiffel tower, the march of the human mind in any particular race or age.

It will be now apparent that the conflict with which the regime of modern education in India opened a hundred years ago,—the conflict between the Old Learning and the New, between indigenous and foreign education, between the Eastern and the Western Humanism,—was never solved or resolved, but only driven under-ground. And to-day it has broken out in a virulent epidemic form, and threatens to make an end of all education, in the name of national education.

National Education.

What is national education? Is it to be a return to the forest Ashramas or the monastic Viharas? Is it to be a return to the paint-bedaubed peepul tree in the village, to the dim cloisters in the rock-cut caves, or to the chequered shade of the Ficus Religiosa by a purling stream? Is it to be a return to recitations and mantras, to the oral tradition of learning, the memorizing and the recital, the enthronement of authority and dogma?

This would be a futile anachronism, even if the resuscitation were possible. But the spirit of Bharata-Varsha is not an anachronism! That spirit transmigrates, and embodies itself anew in the generations of Man! Persian or Greek, Semite or Scythian, Turk or Christian, whoever has wandered here and pitched his tent within the shadow of the snow-clad Himalayan ranges or the sempiternal roar of the Indian Ocean, has come under her mysterious spell. That soul of India has through the ages gone on creating a synthetic culture, in which Nature and Man have been comrades, all sentience has had its kinship recognized with reverence and homage, and the group or communal consciousness has been the nursery and school of the individual conscience.

This Indian spirit has conceived an educational ideal and an educational organization, and has written on imperishable tablets outstanding chapters in the History of Human Education, as memorable as those of the Pedagogy of the Greeks, or of the European Renaissance. The essential stamp of the Genius of India is seen in many features of this indigenous education—in the outdoor or open-air study in intimate touch with Nature, in a corporate life or residence which weans the young from the home for initiation into the greater family of the academic corporation, in long and leisurely years of scholastic study, and above all, in the rule of Brahmacharyya, the rule of the student life comprising three great vows, the vow of chastity, the vow of poverty, and the vow of labour. The vow of Brahmacharyya embraced not only abstinence from luxury and from all impure excitements, not only temperance in mind and body and speech, but also the obligation of Rita, the truth. The vow of poverty abjured all covetousness and money-getting, so that the private purse of the student, prince or beggar that he might be, was cut down to the barest minimum. The vow of labour imposed on the Vidyarthi, the seeker of knowledge, menial duties for the Guru-griha and

the student brotherhood, not omitting building and household economy and conservancy, and made honourable even begging for the maintenance of the Gurukula. The educational ideal was two-fold in character: in an individual reference it was Atma-Vidya, or Brahma-Vidya, the knowledge of the Self, or the vision of the Absolute as the Self, the ultimate goal to which every soul must press forward in the cycle of births and deaths; in a communal reference it was the conservation and transmission of the tradition of culture and learning, of the arts and sciences, from generation to generation, a debt which the individual owes and must repay to the Rishis, the Fathers of the Race.

One characteristic mark of the Educational organization was this:—Education was organized as an integral element in a man's social status. The social and communal systems on which the educational organization was based, ordained a practically free and compulsory higher education for the Brahman, Kshatriya and Vaisya classes, and a well-nigh universal primary education for the village communities. This social and communal status not only socialized education—it ensured that the theoretical instruction, whether elementary or higher, was supplemented by

vocational training, in and through the Upavedas, and later on, through the Vidyas and Kalas (sciences and arts),—though there was a retrogression in the latter-day Chatuspathis and tols. Such is national education, the genuine Swadeshi commodity. Our Universities have much to learn to-day from this old indigenous organization. They may usefully build on the national foundation. But then the foundation must be broadened as well as deepened to answer the living needs of the *complex democratic* civilization of modern times.

But a so-called national education, which is neither national, nor even education, and which, in the anxiety to avoid breeding exotic plants and orchids in a hot-house, would convert the fallow young mind of a whole generation into a noisome jungle of impenetrable cactus and thistle, militates against the national Dharma of India—it leaves unpaid the debt to the Rishis, the Fathers of the Race. Back to Nature and her noble savage is the cry that goes up from the land. At this cry, Father Agastya in the South raises his bowed head and begins to retrace his steps, and that great machinist, Visvakarma, throws up his implements in despair, for the arts of civilization which Visvakarma and Agastya initiated threaten to crumble away in a land which has been fitted

to become a Karma-bhumi, the land of works, through ages of Tapascharyya.

For a national education which abjures Science, machinery and foreign commerce misses the great outstanding fact in the History of Ancient Indian University organization and the connected History of India's Commerce with the world. That fact is this:—The great Indian Universities harboured the experts in machinery (Yantra-vidyas) and the Chemists and metallurgists, and the three great Indian discoveries or inventions which followed—the fast dye, the indigo extract and the tempered steel—enabled India to command far more than a thousand years the markets of the East and the West, and secured to her an easy and universally recognized pre-eminence among the nations of the world as the Mistress of the Middle East, more so than the Munera Terrae, the perfumery and spices of her woods, the pearls of her seas, or the diamonds of her mines. A sane nationalism would revive the educational policy that led an Eastern country to that great achievement, a world-wide foreign commerce from the Eastern Archipelago to the shores of East Africa and South Europe, without the Imperialism of a Rome or a Spain. And if unfortunately India gave the secret of the

Damascus blade to the world, an early instance of science ministering to the arts of destruction, she also gave the Buddha and the Perfect Law to a world in darkness and in chains. A sane Nationalism in a national Indian University would seek to harmonise science and mechanism with Ahimsa, and hold forth, to generations yet unborn and a world in tribulation, the Indian ideal, once realized in History, of a non-imperialist world-commerce, alike in natural commodity and in spiritual Freedom. Which University will lead the way, one would muse and wonder, that which inherits the double renown of Vidya-Vijayanagar, on the upper reaches of the Cauveri, or that of the Eternal City on the Trident laved by the celestial Ganga, or is it to be both, linked together, as they significantly are, by a common Head, one who is the patron of those giant works, those installations of modern science and mechanism, where the Cauveri falls roaring on the jagged jungly rocks of Shiva-Samudram, like Ganga descending on Shiva's own matted locks,—and who is also the inheritor of the immemorial tradition of the East, of Maitri and Peace!

The International University.

This leads me to a paradox:—A truly national University in India must be inter-national.

For India has always been the meeting-ground of divers civilizations, God's own melting-pot for the fusion of warring races and cultures heated in the furnace of tribulation. The radicle of every Indian people to-day is a composite one, physically as well as culturally. And if this compositeness applies to the geographical distribution in racial zones, it applies with equal truth to the temporal distribution, the historic procession of the ages. For India is at once ancient, mediæval and modern. And she is united to the Semitic East of Western Asia, as she is united to the Mongol East of Far Cathay. Universalism and synthesis have therefore been India's message throughout the ages, in the Religion of the Gita, in the Sarvadharma (Universal Religion) of the Jina, in the Sarvagama-pramanya (all-religions-true) of the tenth century, in the Bharatapantha (the All-India Road) of Kabir, in Akbar's Dream, in the Yezur-Veda of Nobili, in Raja Rammohan Ray's cosmic vision. That perpetual fount of Universalism has not dried up on this soil. A world gone mad and clanking the chains in Hymns of Hate, looks, and looks not in vain, to the East, nay to India, for a new gospel of Freedom, a gospel born of the Peace of the Spirit in the oneness of the Brahman

Even in Pouranik India, the Indian Universities studied the Yavanamata, the foreign cult and culture of the times. This was the last but one of the 32 sciences, the penultimate science. The strange spectacle of National Universities in a modern India declaring war against that world-culture, the Yavanamata, with all the violence (and *strafe*) of a Durbasha's soul-force, constitutes one of the great Betrayals in History, the betrayal of the Mother by her best beloved, nay, her own truest child!

The Regional University.

From the international University to the regional, which is now my theme, is not so abrupt a turn as it might seem. Both are signs of the times, complementary expressions of the twentieth century Renaissance.

The international University, as conceived in recent International Conferences, will be a twentieth century El Azhar, congregating, in some world-centre, characteristic national groups of travelling or visiting professors and students from the various Universities of the world. Like those wandering bands, the *scholastici vagantes*, of Mediæval Europe, or like those visitors to our own Mediæval Universities of Vikramasila and Odontopuri, so late as the twelfth century, from

Samarcand and Sir Daria in the West to Siam and Chakradvipa in the East, this twentieth century fraternity of scholars will forge anew those golden bonds of international camaraderie which were shattered three centuries ago by the fateful advent of Nationality and still more of Nationalism in the post-Renaissance world! Mysore University will gladly take part in that fraternal world-exchange, when the call comes.

The Unitary and the Synthetic University.

In the meantime we will be building up the regional University of Mysore. For we in India have now definitely left behind the era of the examining University, as well as that of the affiliating University which regulates College teaching but does not itself teach. Our prototype London has herself undergone two transformations, and will yet undergo a third under the recommendations of the Haldane Commission. In India the Teaching University came to birth in 1905-1906 on the heights of Simla. Its first local habitation and name was the University of Calcutta. It taught only the post-graduate courses. But its real greatness lay in this: it created a new organization for the first time on Indian soil, the organization and Indianization of Research,—a creation which has done more there

than anything else to earn brotherly recognition for the synthetic vision and genius of India in the World's Commonwealth of Learning to-day.

Of the Teaching University, there are many structural types, the Unitary, the Synthetic, the Federal. The Unitary type has a single centre with one or more incorporated or constituent colleges. The Synthetic type builds on a synthesis between the University and the Colleges which have a quasi-independent foundation. Where a Teaching University comes as the crown and apex of a long history of Collegiate developments as in Calcutta, the synthetic type is a necessity. In Mysore, there has been a similar history, but the colleges are all State Colleges, and the State University has been fortunately able to incorporate them all. So far it has conformed to the unitary type. But it has two centres, and therein it departs from the orthodox unitary pattern. Ours therefore is the inevitable *tertium quid*, neither a Unitary nor a Synthetic University proper. And until the University organizes independent Departments of its own, we tend to have a 'diversity' of colleges under one central administrative control, rather than a Teaching University. The predicament of Calcutta is worse; it has centres everywhere and a circumference nowhere except in a five-mile

belt in Dacca! Whether our position in Mysore is one of stable or unstable equilibrium or of no equilibrium, remains to be seen.

Pioneer Work.

If in the matter of a unitary polycentric University we have been pioneers in India, we are likely to be pioneers in a still more important development, which has a world-wide interest and significance. By one of the accidents of our Collegiate history, this University teaches Arts and Humanities in one place, and Science in another. But she must teach that inter-connected Humanism and Naturalism, which is the badge of modern life and culture. To be modern, she must supplement Arts with Science, and Science with Humanity! With these coming developments, Mysore will assume the character of a Federation of University colleges, or practically of Universities. The experiment in federation failed at the Victoria University, because it was on an affiliating basis and was externally imposed. We here in Mysore are bound to succeed because it will be a natural development from within on a unitary basis. In India, the United Provinces of Agra and Oudh,—if not Bengal, East and West—are likely to develop a Federation, *after* we have solved the

converse problem of developing autonomy within the limits of central control.

In another matter, we have been precursors: Mysore interpolated a one-year course (which she calls the Entrance class) as preparatory to the University. We may have to extend it now, but the experiment was in the direction of the Intermediate College now seen to be a vital necessity.

Our Extension Lectures and University Publications are yet in a rudimentary stage, but they testify to a fundamental fact; we aim at developing into a People's University, that coming event in the History of Human Education! A necessary corollary is a Mission to the people.

Desiderata.

But we have not been equally forward in many an other direction. We have developed a post-graduate degree—the M.A. in the Arts department, but none yet in Science. We have not yet differentiated between Pass Courses and Honours schools for graduation, though this is a necessary foundation for the development of Research. And in the matter of Research, that training which comes of the joint work of the professor and the post-graduate or Honours student is not in evidence. We issue no Bulletins of work done in the various departments of

the University, and though one or two individual Professors in the University and the Curator of the Oriental Library have done valuable work which has met with wide recognition in the learned world and in distant Universities, we as a University have done little or nothing to organize Research. And yet Research, the Advancement of Learning, creative or constructive culture, is the very breath in the countenance of a modern University, indeed of all national organization and administration in a progressive State: its endowment is always an object of special concern to Parliaments and Governments. For any intensive administration which is faced with problems of development, and which must aim, according to a pre-ordered plan, at utilizing to the full all the resources and capabilities of a people and region, can ignore Research only at its own peril!

Women's Education.

The higher education of women has been attempted by us in the grand style, with a Women's College and Women Professors and Senators, which might have satisfied Princess Ida herself, though there is nothing particularly epic or homicidal in it. But somehow our programme has not caught on. Man rarely succeeds in

educating woman, though woman makes it her daily business to educate (and to civilize) man, and succeeds—more or less !

Now that the great war has brought a truce, a perpetual one, seemingly, between the sexes, if it has not yet united the Nations in a League, it is proper that we set our house in order. The immobile rigidity of the position in India as regards High School and College education for girls is not merely a result of India's conservatism or apathy. In organizing women's education, the abstract doctrinaires mishandled the problem from the beginning. There have been two capital blunders. They ignored the essential fact that women of different social traditions and functional classes are more differentiated than are men, and that a compulsorily uniform school graduation or plan for men and women, or even for women of differing traditions, would be going against the grain. They also fell into the grievous blunder of making the termini and the spans of the different grades of education the same for boys and girls, irrespective of the differences in their cycles of physical and mental growth, and irrespective of the varying termini imposed by divers marriage customs and marriageable ages depending partly

on those very cycles. In Mysore, for example, keeping in view the existing or emerging social stratification and girls' marriageable ages, there ought to be successive termini at the ages 12, 14, 16, 18, as we pass from the Primary to the Intermediate stage, and each terminus should open unto a proper sphere or destination in society, or lead on to the next higher stage. And for growing girls between 14 and 18, all public tests or examinations are to be shunned as suicidal for the race. In the upper forms of the High Schools there should be more (and higher) imaginative and historical literature in the vernacular, for those girls who go in for Arts. Continuation classes at home, for married women and widows, should be started under the auspices of women's associations like the Mahila Seva Samaj of Bangalore. Training in home-industries and vocational education should be provided in the schools for such young widows as cannot go beyond the school-leaving stage, necessarily a large class where a considerable section of society have the custom of early and universal marriage with no remarriage for widows, and have latterly developed the practice of matching and mating two such classes of unequal incidence of mortality as girls between

9 and 12, and youths between 18 and 22. The University education of women must also be remodelled in two different directions. First, in the ordinary University Course, women may be given the option of additional courses in Literature, the Fine Arts, Hygiene or Advanced Domestic Economy and Domestic Science, in lieu of certain subjects in the regular curriculum. Secondly, and this is even more important and urgent, special facilities should be granted to women for learning the professions of Teaching and Medicine, and for being trained in child welfare, social service and social propaganda work, such as will give them proper openings in the sphere of women's work and status in the new Indian polity. It is only when women's education has been remodelled from top to bottom on these lines, and the original blunder rectified, that in the existing social conditions of Mysore we can hope to draw upon a normal and steady flow from the lower into the higher channels in place of the scanty, capricious and intermittent supply of the last quarter of a century.

New Faculties.

Again, as an infant University, our Faculties are yet undeveloped. Engineering and Commerce,

normally the earliest and the latest to appear, have already emerged. To this Teaching may be added as having already arrived. But others are waiting in the vestibule, or perhaps in the streets. To take these in the order of their urgency, as I conceive it,—Agriculture, Forestry, Mining, Medicine and Public Health, Chemical Technology, Law and Administration, Oriental Research, have yet to make headway, from the field and the forest, the mine and the workshop, the Court or the hospital, the school or the Pathasala, entering by all portals into the University,—for the University of to-day, like the State itself, is universal as life! But they cannot all come in at once. First, there is a certain natural order in the development of these studies which cannot be transgressed. Secondly, their order must also conform to the order of development in the social and the public economy of this people and this State. Thirdly, facultative studies in the University can develop only after (and out of) the Intermediate Colleges which will add certain optional courses in Applied Science and vocational training preparatory either to callings in life or to technological studies for a license or diploma in the University.

Let me take agriculture for an example. Mysore, like the rest of India, has in agriculture the one original staple industry, the fruitful mother of a hundred more, and the great nourisher and provider of her children. And Mysore must guard against the devitalizing process, the abandonment of the soil, of field and farm and homestead, which inevitably ends in rural destitution and devastation, in the overturning of the economic balance, and in the drying up of those reservoirs which feed with a plentiful supply not only the State exchequer but also the factories and workshops depending on the raw produce of the fields, the forests and the mines. Only the development of agriculture as a means of independent income or livelihood for men of narrow means and narrower acres can avert these risks of rural depopulation. No doubt, high class research work on soils, manures and pests, on cross-breeding, acclimatization and fertilization, will continue to be done by Research Departments, whether outside or inside the University, but that which a country with the agricultural population and capabilities of Mysore must develop with zeal and foresight is a number of agricultural (and connected) pursuits in central as well as outlying tracts, and these can be built

up on a modern basis only by the co-operation of the State and the landed as well as landless cultivator, with the help of trained intelligence and co-operative credit. A considerable body of trained entrepreneurs, agents and overseers, working on Sir Horace Plunkett's plan of co-operative production and co-operative distribution, are required to solve the agricultural problems of a peasantry not less numerous than the Irish, and in this country they can be created only by the Intermediate Colleges on their vocational side, in which liberal education in the basic and applied sciences will be combined with practical training and farm work to be followed presently by one year's further training for the lower University diploma. These trained men attached to the soil and sprung from the soil will form the necessary link between the peasantry and the experts of the Research Department and of the Model and Demonstration Farms, but unfortunately this has been hitherto a missing link in the evolution of a scientific, at any rate a modern, Indian agriculture. Many things await skilled and co-operative treatment: intensive farming, the growing of cotton, sugarcane, oil-seeds and fibres, dairy farming, cattle breeding and fodder

ensilage, among others; but a system of instruction in practical farming in the field classes or in secondary schools, will fail to evoke the capacity for that intelligent adaptation and control of the processes or factors involved, which only a scientific education ensures. And such scientific education of a foreign tradition and in a foreign vehicle cannot be imparted to the Indian before he reaches the Intermediate and the University diploma stage. In Mysore, the present Director of Agriculture has already done very valuable work as a pioneer of agricultural education on modern lines, and further developments that may be necessary will benefit by his extensive knowledge and study of Indian conditions.

What applies to the Department of Agriculture and to its intimate bearing on the coming developments in the University applies with greater or less force to other departments as well, such as those of Public Works, Industries and Commerce, Mining, Forestry, the Geological and Chemical Departments, and Archæology. Many of these departments exist for developing to their fullest the capabilities and resources of the State, and the best of capabilities is of course the capacity of the people,—which must therefore be trained. The University is the central organ of

that teaching. It builds the scientific foundation in correlated studies and in pure research, and it must *complete* the practical training given in its own departments by means of filiation to and co-ordination with the corresponding departments of the State. An intimate alliance between the State departments and the State University for training as well as research is a characteristic feature of advanced and intensive educational administration and organization to-day. Indeed such filiation and co-ordination are a *sine qua non*, if the State University is to be, not an Encyclopædic University of the Napoleonic pattern, nor a Pure Culture or Research Installation, but a Regional University whose business it is to organize teaching and research so as to develop the material and moral capabilities of the region and the people in intimate relation to each other.

But this alliance does not mean that the graduates so turned out must expect to be absorbed in the State service or administration. Some of them will certainly be so absorbed, but by far the larger number must carry on the work in new and virgin fields by individual or joint enterprise and effort. They must settle down in the country, or spread abroad, over the Indian continent, carrying far and wide

the prestige of their own State and their own people as among the most potent and creative forces in the Indian Renaissance which is being born to-day in the throes of a mighty birth!

It is only thus,—if we sow the seed broadcast on the soil,—that, one day, a great harvest may await the sickle of the reaper. But Doubt never sowed, nor Impatience ever reaped. We are on the Mount of Vision, and must possess the faith that crossed the wilderness and climbed the mountain to be vouchsafed the sight of the Promised Land.

Our University students (not discounting the Entrance Classes), roughly speaking, number 1 in 3,200 of the population, against Bengal's 1 in 1,500, and Scotland's 1 in 600 several years ago. Those who fear a glut may set their fears at rest. And the best comfort is the reflection that this is a Regional University for which there can be no glut or over-production. For a Regional University, as I said in my inaugural speech at the Senate, adapts its studies to the utilization of the man-power as well as the natural resources of the region. The organization and training of efficient manhood in every department of national and social activity is the watchword of education, and the University is

the chief agency in the mobilization of all the cultural resources of the nation for the paramount purposes of national expansion and progress, nay of national existence itself. A Regional University is the people's business, and it is a first charge on the national income.

University Finance.

One curious fact stands out on an examination of the expenditure on the University under the different heads, a fact which is apt to be missed and therefore deserves to be mentioned —it is the exceedingly low additional cost of the arrangements which have converted the previously existing Colleges into a Regional University. If it be remembered that the Central College, the Maharaja's College, the Maharani's College and the Oriental Library were all in existence before the University was born, and that the Engineering College was in existence years ago, though it was subsequently disestablished, if it be also borne in mind that with the growth of the student population and its needs the further extensions and developments of these Institutions could not have been prevented, it will be realized that the arrangements for their conversion into a University do not cost more than three-quarters of a lakh in all, out of a sum of about forty-three lakhs and a

quarter spent on education,—in other words, no more than 1.7 per cent. Even if the University as such were to cease to exist, these Institutions could not cease, and the relief to the public funds, so far as the recurring expenditure is concerned, would be no more than a rupee and twelve annas out of every hundred rupees spent on education in the State. With this sum of a rupee and twelve annas we ensure a future of progressive efficiency and economy for the remaining 98 rupees; we give a central organ, a sort of cerebro-spinal system, to the educational organization of the State; lastly, we give a Regional University which is at once the heritage and the intellectual capital of every province in India to-day, and to which a progressive and enlightened State here in the South first showed the way.

Pending Questions.—The Senate Committee for Reorganization.

Other questions still await solution and are being considered, *e.g.*, the question of College fees, or in other words, the share borne by the State of the cost of educating each student,—the scheme of scholarships and stipends in the University,—the proper regulation of Science teaching in the Entrance and preparatory stages and the extent of accommodation for Science

students in the University,—the place of the Vernacular and other languages in the curricula,—schemes of Physical Culture and of medical inspection and student welfare,—the introduction of a post-graduate course in Teaching,—the provision of a year's practical training as a preliminary to the Bachelor's degree in Engineering, and the future course and development of the Commerce Department.

But the question of questions before us is the orientation of our University to the scheme outlined in the monumental report of the Calcutta University Commission. That was in reality an All-India Commission, and the older Universities have begun to build on the ground-plan sketched by the Commissioners. Our University in conformity to the general plan must re-model and re-orientate itself, and the Senate appointed a Committee in March last to report on the question. This reorganization must be our main business in the next two years.

Statistics of Passes.

The number of students in the colleges has risen steadily from 593 in the year the University was started to 1,048 in 1920-21,—an increase of 76 per cent. The increase was, roughly speaking, 4 per cent in the first year, 19 and 14

per cent successively in the next two years, and 26 per cent in the last. This shows an acceleration. The number of Entrance passes increased from 120 in 1917 to 420 in 1920, but fell to 282 in 1921 owing to a heavy percentage of failures. The proportion of passes has been very unsteady, having been in the neighbourhood of a half in 1917 and 1920, and of a third in 1918, 1919 and 1921. The number of B.A.'s has risen from 40 in 1917 to 135 in the present year; and the number of Bachelors in Science from 12 in 1919 to 28 in the present year. The number of Bachelors in Commerce has been 20 in this year as in the last. 29 students passed the Bachelorship in Engineering, but they are not entitled to the degree till they have completed a year's practical training in some approved Engineering firm or works. 15 have qualified for the Master's degree, 4 in English, 1 in Philosophy, 3 in Sanskrit and 7 in History, Economics and Political Science. 4 ladies are eligible for the Bachelor's Degree in the present year against 1 lady graduate from this State in 1917.

The percentage of passes for the B.A. Examination has varied far less than that for the Entrance. Discounting the last year when only a third of the candidates were successful. the

proportion has been well over a half; and in the present year it has been well over three-fifths. In the Entrance, the proportion has fluctuated from a third to a half; in the B.A. from a half to three-fifths. The higher level of success in the later and higher examination shows that the Entrance serves its purpose as a sieve to some extent.

It appears that the number of graduates turned out in the last two years bore a proportion of 40 per cent to the number of candidates who had sat for the Entrance Examination in the corresponding biennium three years back.

We have not gone in, it appears, for the opposite system under which many are called but few are chosen; in other words, where the matriculation percentage is high and the percentage of graduation low. The question of adopting one system or the other is a matter of free choice, depending on considerations of the social economy and the effective social demand for different grades of training and efficiency.

I cannot close the brief report of our work during the last year without expressing my grateful regards for my distinguished predecessor, Sir Leslie Miller, who guided the fortunes of the University during an interregnum. His administration of the affairs of the University was marked

by a sound and penetrating judgment, clearness of perception, and a judicial habit of mind. These traits coupled with a dignified and imperturbable urbanity of temper have made him a most helpful and valued Colleague on the University Council. His address at the last Convocation, in sounding a note of warning as regards the financial outlook of the University, appealed to local beneficence and patriotism for the endowment of Chairs in the University, and it is to be hoped that a fitting response will be forthcoming to an appeal so frank and convincing. Several endowments were acknowledged by my predecessor last year. Three more endowments call for notice, one by Rao Bahadur M. C. Rangaiengar, one by the Bhabha Memorial Fund Committee, and the third by the now defunct Mysore Branch of the National Indian Association received through Rao Bahadur M. C. Rangaiengar. The University is deeply grateful to the donors for their valued contributions.

It gives me great pleasure now to address a few words to the students assembled at this Convocation. You who have been called by your *Alma Mater* to receive her benedictions,—my first greeting to you is in the words of the poet "My heart is at your festival." I congratulate you

on your personal triumphs and success. I congratulate you still more because you live in stirring times. It has been your lot to live through the greatest War in History, through a world-cataclysm which has changed the face of things on this globe for all time. "One hour of crowded glorious life is worth an age without a name." The great War has been even more fatal to all half-truths and make-believes, to patched-up virtues and soft glossings, than any of the great Religions of Mankind. And young as you are, the Psychology of War and of the after-math of War, has profoundly affected the perspective of youth. The "vision splendid" in you has assumed a sober colouring from man's mortality, and your ears have heard the song of the Fates, above the roar and tumult of the world!

For many of you, for most of you, questions of personal happiness and unhappiness are beside the mark to-day. With your motherland in a devastating conflagration, in the throes of a mighty convulsion which has broken up her peaceful and ordered progress, you are burning with a passion for you know not what,—a passion of self-immolation in some glorious cause. Nothing external has happened to you, but of a sudden you feel that the world has changed its

face!—there suddenly start up around you enveloping mists and dazzling glories, angelic choirs and dreadful silences. You, young men, are those of whom it was foretold: your young men shall dream dreams. They are those who live in Messianic times, for whom the far-off divine event comes and stands greeting at the door. That event and those times do not bring glad tidings. Most often, they are times of tribulation and of darkness, but a divine madness fills them. I read signs of that enthusiasm in your hungry eyes. I will not summon you to the bar of Reason, and arraign your Hope of visionariness and your Love of blindness. Love is apt to be blind, and Hope is always enchanted. But I call you, children of Bharatavarsha, to a larger Hope, and a diviner Love. That Hope shall make you free as the Truth alone can make you free, and that Love shall be Wisdom.

But first let me speak to you of the other love, which possesses with something of a demoniac possession: the love of your country, the love of Freedom. What is your country? What is your Freedom?

I will answer for you. Your country is Bharata, but Bharata is not, has never been, confined within territorial bounds. Brahma is

the true country of the Spirit: that has been India's claim through the ages! And Brahmavarta, Aryavarta, Bharatavarsha, Jumbudvipa,—in extending circles, the country of the Spirit has ever moved forward: it has had territorial embodiments, but no territorial limits. The visible country is but a symbol of the cosmos, the visible History is but a moment in Eternity. You cannot be true to your country if your vision should be so blurred as to barter the cosmic and the eternal for a place in or out of the British Empire, or, for that matter, for the dominion of the Earth. You belong to a tradition and a race that carried with it the original home, Brahma or Brahmavarta, in its march, its migrations, its settlements. Do not sell that birthright for a mess of pottage. Claim the entire world as your own. Wherever the Atman reveals itself you have your country and countrymen; wherever the Atman is dishonoured, you are ousted and dishonoured. Correct therefore your passion for territorial nationality from your country's true standpoint. Political, national, territorial organizations and delimitations, the historic passion and patriotism, are all very necessary, all very real, and must be accepted as a working arrangement, but not unto blindness and obsession, unto hate

or fury, unto the self-alienation of the Spirit. India, this Greater India, which has no bounds or confines, calls to you as your *patria eterna*. May this Sanatana Bharata, your Eternal country, represent through you, her sons, in the Leagues and Councils of the World, the idea of this extra-territorial nationality, this extra-territorial sovereignty, which the creed of Buddha, the Enlightened and the Enlightener, first preached to the world. A Buddhist Sloka given by Aryadeva, the itinerant Buddhist preacher, to the masses exhorts the sovereigns of the world to follow the Code of Dharma without territorial limits, a Code of Laws which places the good of other States and peoples in the same category with that of their own. See that you are not betrayed into any obsession of hate which makes you unfit to be Servants of this Greater India, in whose name you must go forth to the nations of the world. It is a name which unites,—for the follower of the Prophet will recognize herein the advent of his Islam, the Peace of God,—and the follower of the Son of Man the advent of the promised Kingdom of God.

Unites! For it is the one great law of Personality in the individual as in the group or mass: Each can realize himself only by helping others to realize themselves. And this law

implies the converse—each can help others to realize themselves, only if he seeks to realize himself. Each in all, and all in each! For it is the Great Being, Universal Humanity, or as others would have it, the Great God, who is being accomplished and fulfilled in every man, woman and child, individually as well as collectively. Doing or suffering, enjoying or enjoyed, we are His hands and His feet, His eyes and His mouths. The weakness of one is the weakness of all, the strength of one is the strength of all. Victory is mine, saith the Lord; defeat is mine, saith His Consort of the Infinite Compassion!

And seek not the lesser Freedom, but first the Greater Freedom which embraces all lesser privileges and franchises. Be free of the Commonwealth, not merely of the Federation of the British Empire or of the World-Federation when it comes, but also of this your true country, the Country of the Spirit. Remember you are citizens of no mean city, not of Benares, not of Delhi, not of Rome, those eternal cities of the East or the West that come on the tidal waves of History and are borne away by that tide, but of the Eternal City that sits enthroned in the Brahman above the uproar and the tumult of Man in his generations!

Munir-ul-Talim H. J. Bhabha, M.A.

Address delivered at the Convocation of the University of Mysore on 4th October 1922 by Munir-ul-Talim H. J. Bhabha, M.A.

MAY IT PLEASE YOUR HIGHNESS, MEMBERS OF THE SENATE, LADIES AND GENTLEMEN,

I esteem it a great honour and privilege to be invited from my seclusion to deliver an address before this Convocation. The higher the honour the greater is my diffidence to appear before you after the eminent educationists who have given excellent addresses on previous occasions. I fear I was somewhat hasty when I accepted the invitation from a sense of duty to obey His Highness the Chancellor's wish which was to me a command rather than from any exaggerated feeling of self-esteem. I have put together a few thoughts that have struck me from a distance, for the expression of which I beseech your kind indulgence.

When shortly after my retirement from the Educational Department, over which I had the honour to preside for a period of twenty years, it was decided to establish the University of Mysore, I heard the news with feelings of great gratification. That the department which had been built up with strenuous exertion for a long series of years

was to be crowned by a University naturally filled my heart with joy and pride. The wisdom of having a University of our own which had long been looked forward to cannot be doubted. The Colleges which had been affiliated to a distant University naturally would benefit the most by the establishment of a local University of which they would be integral parts, and in the management of which they would have a leading part. The curricula and schemes of examinations instead of being super-imposed by a distant and sometimes unsympathetic body would be arranged to their own satisfaction by the local Professors on well-thought outlines. It is a great thing for a people to have a Teaching University of their own in direct sympathy with their wants and aspirations, so that they may have the kind of education they esteem most advantageous to their interests. No system of education can flourish so well as that which satisfies the needs and wishes of the people. Such a Teaching University does away with the disadvantages of external examinations and brings students and professors into intimate connection, so that cramming of the worst kind is effectively discouraged and real progress and scholarly knowledge are encouraged, while at the same time physical education and the training of

character are attended to with great care. Th University of Mysore, though it cannot strike ou any great departures from the beaten trac of older Universities, will be free to encourag the study of Kannada, Sanskrit and Persian in satisfactory way, to foster the growth and public tion of a modern Kannada literature without whic the education of a whole people cannot proceed to promote the study of such new objects an provide such practical training as may satisfy th aspirations of the people and suit their economi and social needs, to form schemes of its own female education and oriental learning, and arouse patriotic love within the hearts of th people for a system of education which is unde their own control. There is further no agenc so powerful as a local University for extra-mur instruction, for not merely organizing what a called Extension Lectures but regular schem for adult education for giving instruction up the level of University standards to people who circumstances have not permitted to acqui higher education but who have the desire ar ability to profit by it. These are no small advar ages, and that they are now available to the peop of this State presages a bright educational futu for them.

The Mysore State has always been distinguished for its earnestness and liberality in promoting education. No Native State or Provincial Government in India has been able to spare such a large proportion of its revenues for education as the Mysore State. This is hardly a place for giving comparative statistics, but your Educational Department can easily prove that the proportion of total revenues spent on Education in Mysore is the highest of any province in India, though it may be much lower than in the advanced countries of Europe and America, and in Japan. In an advanced State like Mysore a University was bound to come, and though some publicists may be tempted to be critical and look askance at the commencement, when in a short time it has proved its great usefulness, it will disarm all criticism and ungenerous comments.

One of the principal advantages of having a Teaching University of our own is to have a full-time Vice-Chancellor who watches over the instruction and discipline of the students, their physical welfare, their corporate life and intimate connection with their Professors. I may be excused however if I refer, for a moment, to a possible danger, though it should be very unlikely, of the sense of responsibility of the Heads and Professors

of Colleges getting weakened for the maintenance of discipline and the training of character. The authorities of a college should be solely and wholly responsible for the internal discipline of a college, and the bonds between the Professors and pupils should in no case get weakened. It is the personality of the teacher that exercises the most potent influence over the character and manners as well as the intellect of the pupil. It would be a misfortune if this influence became less for any reason.

It is often asked what is a University and what are its functions. Cardinal Newman in his eloquent language gives a definition which can bear repetition:

"If I were asked to describe as briefly and popularly as I could what a University was, I should draw my answer from its ancient designation of a *Studium Generale*, or 'School of Universal Learning'. This description implies the assemblage of strangers from all parts in one spot—*from all parts;* else, how will you find professors and students for every department of knowledge? *and in one spot;* else, how can there be any school at all? Accordingly, in its simple and rudimental form, it is a school of knowledge of every kind, consisting of teachers and

learners from every quarter. Many things are requisite to complete and satisfy the idea embodied in this description; but such as this a University seems to be in its essence, a place for the communication and circulation of thought, by means of personal intercourse, through a wide extent of country. . . . . A University is the place to which a thousand schools make contributions; in which the intellect may safely range and speculate, sure to find its equal in some antagonist activity, and its judge in the tribunal of truth. It is a place where inquiry is pushed forward, and discoveries verified and perfected, and rashness rendered innocuous, and error exposed, by the collision of mind with mind, and knowledge with knowledge. It is the place where the Professor becomes eloquent, and is a missionary and a preacher, displaying his science in its most complete and most winning form, pouring it forth with the zeal of enthusiasm, and lighting up his own love of it in the breasts of his hearers. It is the place where the catechist makes good the ground as he goes, treading in the truth day by day into the ready memory, and wedging and tightening it into the expanding reason. It is a place which wins the admiration of the young by its celebrity, kindles the affections

of the middle-aged by its beauty, and rivets the fidelity of the old by its associations. It is a seat of wisdom, a light of the world, a minister of the faith, an *Alma Mater* of the rising generation. It is this and a great deal more and demands a somewhat better head and hand than mine to describe it well."

Although in the above definition a University is defined as *Studium Generale*, that is, a School of Universal Learning, it does not follow that every University should teach every subject. The expanse of knowledge is so wide, the number of sciences and their sub-divisions is so large that it is impossible for any University in the world to attempt to teach them all, and the resources of no State would suffice to maintain such a University. For a new University like Mysore, which is not endowed but is maintained wholly by the State, it is safest to limit its functions at first to an irreducible minimum of subjects. We must have Languages and their Literatures; in our case English, Sanskrit, Persian, Kannada, other Vernaculars and French; we must have History, both Ancient and Modern, Philosophy, Mathematics, and Physics and Chemistry. We have already in addition to this irreducible minimum of subjects Economics, Commerce,

Engineering and the natural sciences of Geology and Botany.

It is no doubt a disadvantage that the departments of Science and the Humanities in the Mysore University are placed at a great distance from one another and constant intercourse between students of both departments is not possible. There is no advantage so great in a University as the constant interchange of thought between students of Science and Engineering on the one hand and those of Literature, Philosophy and History on the other. A means of lessening this disadvantage is to bring about friendly meetings in rival contests of games, debates, lectures, and social gatherings. A social week in Bangalore and another in Mysore in different parts of the year for the students of both sections would combine pleasure with instruction. Such interchange of ideas removes narrow-mindedness, broadens the intellectual outlook, and produces a real world of culture and liberal learning.

Everywhere the addition of new subjects to the programme of studies depends on various circumstances, on geographical position, on a donor appearing with a handsome endowment, on an eminent teacher rising in our midst to whom students flock in large numbers and who

can lead them on to advanced studies and research. As for endowments India is essentially a poor country, and we have hardly any Rockfellers or Carnegies among us. The Calcutta University is the only University in India which has been fortunate enough under the enthusiastic advocacy of Sir Asutosh Mookerjee to obtain large endowments from leaders of the bar and from Zemindars of Bengal. Even Bombay with its merchant princes has not shown yet anything more than a long list of scholarships and prizes as Mysore has already begun to show. But scholarships and prizes are not endowments for chairs, laboratories and libraries. Until the endowments come the expansion of the University has to wait, unless the State can, without injury to other interests, spare more funds and can take up the additional burden. But when they come sooner or later as they are bound to do in the case of Universities admittedly doing good work, the choice of new subjects will depend upon various circumstances, geographical, economical and social. In the case, however, of subjects like mining and metallurgy it would perhaps be more advantageous to found scholarships to enable selected students to go to well-equipped European Universities of established reputation in the

teaching of mining and metallurgy like Birmingham, Manchester, Sheffield, or to America than to have costly technological departments of our own. Agriculture and the sugar industry which are of great importance to the country should claim the first attention and also suitable subjects of applied chemistry like the chemistry of fats and oils, lac industry, of dyes, gums, resins and varnishes, etc. With the Indian Institute of Science close at hand which is handsomely aided by the Mysore State, important help can always be obtained in technological subjects from that Institute which is being re-organized at present on improved lines.

Before the further addition of other faculties and subjects to be taught by the University is discussed, it is to be hoped that the question of having honours courses separate from those of the ordinary degree in Arts and Science will be taken up in earnest. I believe it has been to some extent already discussed. But unless a clear distinction is made between the courses for an ordinary degree and those for an honours degree, the student of exceptional talents will not be distinguished from another of average abilities, nor can the former be encouraged to do his best without such differentiation. Such a want of

opportunity to excel given to students of excellent abilities is so much loss to the University and the country. The Madras University has set a most admirable example by providing honours courses which may be followed in Mysore. Moreover, research work and training in the methods of research are the most important functions of a University which are best carried out when there are honours courses.

Though the number of faculties and subjects may perforce have to be limited in a young University, what is perhaps the most important aspect of University education must not be undervalued or forgotten. University teaching especially in a unitary University like Mysore exercises a most powerful influence on the character and manners of the students. It is the character-forming influence of University education, which is perhaps its most valuable part. A student may not on leaving the University find lucrative work which will rapidly advance his material interests, but his help and company will be sought after as of one who can always be relied upon, whose character is unimpeachable, whose lofty aims, self-sacrifice and readiness to help his neighbours and hatred of all meanness distinguish him from his less fortunate brethren.

A residential and unitary University gives such scope to high-minded professors and tutors for the exercise of elevating influence on their pupils' character and manners as cannot be found in any other educational institution. These influences exercised in an unobtrusive way leave a stamp on the mind and manners of young men which lasts a life-time. It is in the University that young men have an opportunity of learning industrious and persevering habits, and that intense love of work which ensures their success in life. It is in the University that they receive those humanizing influences which broaden their outlook on life, and give such an insight into human nature as renders them worthy leaders of men in future. The material result of University education at the commencement of life may be small, but their moral elevation is their best reward. I am glad to say that the educated Mysorean is already making a good name for himself in other parts of the country. Respectful, obedient and of gentle manners he has by his keen sense of duty and devotion to work already won golden opinions wherever he has found work.

There is no doubt that our educated men have often long to wait for adequate recognition

of their merits from a material point of view in a poor country like India. The number of careers open to the best products of University education in India compared to those open to similar men in more advanced countries are, it must be admitted, very few, and cause anxiety to them and their parents who at great sacrifice have given them higher education. Until the economic state of the country improves by the development of trade and industries, the opportunities of fairly remunerative employment will, I fear, remain limited. The University cannot increase these opportunities. It can only help to a limited extent by shaping its courses of instruction so that they may suit the nature of employment in trade and industry. While a highly educated Englishman can find a career in the Church or the Army or in the higher administrative branches of the public service both at home and abroad, Indian youths have no similar openings. The higher grades of Engineering, Medical and Civil Services are in British India mostly filled by Englishmen. In an enlightened Native State like Mysore, however, the higher grades of service are happily open to Indians of high education, but the number of well-paid posts is necessarily limited in the State. The only careers usually

open to an ordinary graduate are the lower grades of the Civil and Administrative services, at the bar, and in the Judicial, Public Works, Medical and Educational Departments, and in other kinds of work which require literary ability and high character.

In industrial concerns there is a popular prejudice, which is often justified by facts, that a highly educated man is unpractical and not suitable for employment. Want of manual training in the education received at school is often his misfortune. A natural or inherited dislike of practical work which requires the ready use of hands is a great hindrance to admission to the avenues of industry. Unless such a man begins his career on the lowest rung of the ladder, he gets no chance of rising in industrial pursuits. But when once he has established his footing he can rise rapidly by his intelligence, ability and character above a number of ill-educated competitors. It is false pride often to refuse to make a modest beginning. Most young men have to learn that though they may be trained in theoretical science, in all industries requiring practical skill they have to commence work low down in a factory. The scientific training gives him an advantage over uneducated workmen, and

as he understands the reason of every process and can use his resourcefulness in time of need, he rapidly proves his superiority and may rise in a short time to the highest controlling post from very modest beginnings. This is a lesson in life which most of our educated men ambitious of a practical career have yet to learn.

Distinguished students in Europe and America on completing their courses of higher engineering studies at a University find it necessary to pay high premia of two to three hundred pounds a year for two or three years in order to apprentice themselves in great engineering or manufacturing works to acquire practical experience, and in such works they commence in the lowest grade and rise step by step through all the stages of work. It is such men that achieve success in their profession. During this apprenticeship they are subjected to severe discipline and have to obey the orders of their superiors implicitly although these orders may have the appearance of being inconsistent with the theoretical teaching they have had at College. They also learn how to handle labour as they rise to positions of responsibility, in which they have to control the actions of other workmen, and at the same time they acquire tact in dealing with

their associates as well as their superiors. A man who is always at variance with his colleagues cannot be chosen by his superiors to fill positions of trust and responsibility. It will thus be seen how essential practical training is and how a successful industrialist should acquire all these practical qualifications after completing his theoretical course. It is true that great Engineering Works are few in number in India and earnest students may have to go to Europe or America for such apprenticeship. But the best use should be made of the existing works in India.

What is true of engineering students is also true of scientific students who are eager to rise in industrial pursuits. And the same thing is *mutatis mutandis* true of the literary scholars turned out by the University. They have to commence life in these days of keen competition in humble positions in the hope of future advancement unless they are blessed with means which make them independent. The struggle in life is growing on every side and in a poor country like India it is at its worst.

I refer to the difficulties of finding a ready career immediately after completing a course of University education, even in the case of those

who have gone through a highly scientific training, not with any idea of discouraging the students but only as a warning against possible disappointment, and to invite attention to remedies or rather palliative measures under the existing circumstances. There is nowhere in India such eager desire to obtain the highest education obtainable as there is among the people of Mysore, because the intellectual classes have no other avenue to success in life except through higher education. Mysore being an inland Province has hardly any commerce, all its trade being an exchange of its raw products with neighbouring parts for what is necessary to supply its limited wants. Industries have not been developed and the country on the whole is poor, and its wants are few. Under such circumstances higher education is the only resort of ambitious young men. The lure of higher education attracts all men that possess some ability, and consequently there is a tremendous rush of students knocking at the door of the University for admission. The numbers of students in the Maharaja's College and the Central College which were 275 and 313 in 1916-17 have risen in five years to 518 and 359 respectively, the admission into the science classes of the Central College being necessarily restricted on

account of the limited accommodation for practical work in the laboratories. The strength of the Engineering College which was 45 in 1917-18 has increased in the short space of four years to 156 in 1921-22. The Entrance Examination of the Mysore University was held for the first time in 1917 when the number of candidates was 244 of whom 120 were declared to have passed. The corresponding figures in 1921 were 1,029 and 287. If the increase proceeds at the present rate, it will soon become impossible to give admission to even half the number seeking it. It might be of use to inquire what remedies or palliatives can be found for the present state of things. One way would be to add to the number of Faculties by adding Medicine and Law as soon as may be convenient. The Medical Colleges of other parts of India are already unable to admit Mysorean students as all their available accommodation is required for local men. How far funds would be available for such expansion of the work of the University is a question for the administrative authorities of the State to solve. In considering the answer to this question it will have to be borne in mind that all departments of education, University, High, Middle and Primary, should proceed with equal step, no one department being

favoured at the cost of the others. Another and perhaps more effective remedy would be to turn the present Collegiate High Schools into Intermediate Colleges by adding one more year to the course of study in the Collegiate Schools. The Intermediate Colleges would be formed of four classes, the present fifth and sixth forms and two College classes. The Entrance Examination would mark the completion of the Intermediate College course, while the S.S.L.C. Examination would mark the completion of the course ending with the sixth form. When the Intermediate Colleges are formed it should be possible to start alternative classes from the fifth form upwards, three periods in the morning being devoted to such cultural subjects as are necessary for all pupils, and the whole afternoon being devoted in the case of some pupils to academical subjects and in the case of others to special or vocational subjects and workshop practice, which would fit the pupils for practical work and a career in life without having to proceed to the University. Such alternative subjects might be various, and should include agriculture the chief industry of India, mechanical and civil engineering in their lower branches, training for a lower teacher's diploma than the B.T. Degree, domestic science

for girls, commercial training, training for telegraphists and for police duty, etc. The number of vocational subjects may be increased from time to time as need is felt. As many of the vocational courses of the Intermediate Colleges may be co-ordinated with higher University teaching as possible, to encourage a few select lads to proceed to the University if they are deserving. Such co-ordination would be easy to make when there are Colleges of University status teaching the same subjects. Thus the Intermediate Colleges would provide education for a large number of young men who have not the abilities or the means of proceeding to the University but prefer to go into active life from the Intermediate College or High School. Along with the formation and expansion of Intermediate Colleges a well-thought-out scheme of Technical Instruction with graded institutions from Taluk and District schools to a Technological Institute, in which whole-time instruction is given in technical subjects with workshop practice, may be instituted. To work out schemes of this kind will require time, experience and a heavy outlay. Yet it is worth while by offering alternative courses to boys of average abilities to check the present rush to the University and reserve University

Education for young men of the highest capacities and for those who desire high education in cultural subjects, and have independent means and leisure.

Similarly for women a graded scheme in subjects of domestic science from middle schools upwards to the University can be arranged. Your learned Vice-Chancellor referred to this subject in his address last year. It would be wrong to consider that subjects of domestic science are not worthy of taking a place in University education. When it is considered that women's chief function in life is that of maker of the home and man's chief happiness is found in a well-ordered home, any teaching which fits a woman to be a model wife and mother would be welcomed by Indian women who are unsurpassed in devotion to their duties. The humbler duties of cookery and laundry work may be taught in middle schools for girls by practical lessons while subjects like hygiene, home-nursing and economics, etc., may be taught in Girls' High Schools. In the University a higher course worthy of it can be arranged for women in select portions of applied chemistry, sanitary science, applied hygiene, bacteriology, general biology, and physics with practical demonstrations and

experiments, in economics of the household, in general and child psychology and ethics. There is quite enough of cultural and scientific training for women in a course like this to make it equal to an advanced course for men. A department for the education of women built up gradually from below is what is wanted for giving an impetus and right direction to women's education in Mysore. When the Maharani's College was started forty years ago by a few enthusiasts there were hardly two or three good middle schools for girls in the Province. Its establishment was evidently much too premature.

Graduates of the Mysore University of 1922, I congratulate you on your success in the University examinations and hope and trust that it will be a precursor of equally great success in life. You have received an education, which is second to none obtainable in India, by the enlightened liberality of His Highness the Maharaja. You have given proofs of your industry and more than average abilities by passing your examinations. The culture and the training of character you have received will make you useful and enlightened subjects of His Highness, and I hope you will make worthy use of your opportunities in a way that will reflect credit on

your University. You have taken a solemn obligation to-day to uphold and advance social order and the well-being of your fellow-men. This is a comprehensive obligation. Your first duty is to be hearty and firm in your loyalty to your Maharaja and the State that have done so much for your enlightenment, culture and happiness. If the spirit of unrest that has spread to a considerable extent in other parts of India find entrance into the State, it will be your duty to fight against it and prevent it from contaminating the ingenuous minds of the people of this Province. And further it is your duty to preach and implant in the minds of all Mysoreans loyalty to the suzerain power under whose protection and by whose generous guidance and help the State that has educated you has flourished. But you have sworn also to uphold and advance social order and well-being of your fellow-men. By your education you will be centres of light wherever fortune may place you. You have knowledge, your judgment has been cultivated, and you are able to decide what is right from what is wrong, what is proper from what is improper. You have also under the humanising influences of the University learnt to sympathize with your less fortunate brethren, to understand their weaknesses

and deficiencies and appreciate their just hopes and aspirations. It will be your duty to guide them by your wisdom, and help them by your knowledge to fulfil their righteous aspirations. You will see around you a vast amount of ignorance, prejudice and blind adherence to long-established usage which may have had a justification in ages long gone by, but which cannot suit the present enlightened times. It will be your duty with your wider knowledge and keener judgment to lead the blind and the ignorant into the right path and persuade them to adopt reforms that would increase their happiness. You should make the cause of popular education your own, and give your personal help in spreading Primary education among children and especially in helping the cause of adult education among the people around you. On local and municipal boards your active work will be required. By your generous sympathies and help you can bring enlightenment into many dark nooks, and happiness into the lives of your unfortunate fellow-men. For these unselfish services the State that has educated you has claims upon you, and you will increase your own happiness by performing them. Your joy and satisfaction in helping others will make you happier. In whatever you do always entertain

high motives, suppress ungenerous and mean feelings, and be always ready to render service to others, while not neglecting your own interests or those of the people nearest you. I wish you all success and prosperity in your future life.

May this University flourish for ever.

Address delivered at the Convocation of the University of Mysore on 24th October 1923 by Sir P. S. Sivaswamy Aiyar, K.C.S.I., C.I.E.

YOUR HIGHNESS, MR. VICE-CHANCELLOR, LADIES AND GENTLEMEN,

When the gracious wish of His Highness the Maharaja was conveyed to me that I should deliver the customary address on this occasion, I felt it to be my duty to comply with the request of a prince whom I have had the honour and privilege of knowing for several years and for whom I cherish feelings of high esteem and admiration as the enlightened ruler of a model State and for his virtues alike in public and private life. While I am deeply sensible of the honour conferred by the Maharaja's choice, I am even more sensible of its onerous character and of the difficulties of the task. The topics covered by a Convocation address are more or less hackneyed and it is hardly possible to discover any topics which have not already been dwelt upon in this University or in the sister Universities of India. The rule of your University which requires an address suitable to the occasion is somewhat different in its terms from the rule of the Madras University which prescribes that the address

Sir P. S. Sivaswami Aiyar, K.C.S.I., C.I.E.

should exhort the graduates to conduct themselves suitably unto the position to which they have attained by their respective degrees. I have no qualifications or experience as an educational expert. My only claim to a hearing is my connection with the Madras University for a period of twenty years and a year's connection with the Hindu University of Benares and the interest which I have naturally taken in university affairs. I shall therefore avail myself of the latitude of your rule and claim your indulgence in the observations I am about to make.

At the time when the Government of Mysore decided to sever the affiliation of its colleges to the University of Madras and found a university of its own, I happened to be the Vice-Chancellor of the Madras University. There were doubts and misgivings in some quarters as to the preparedness of Mysore for an independent university of its own, but I never entertained any such doubts or misgivings myself and was optimistic about its success. Apart from the question as to the suitability of the affiliating type of university and apart from the question whether the Madras University had changed its character at all even in respect of the colleges situate within the metropolitan area, I had long entertained the

conviction that a single university for the whole of the area comprised within the jurisdiction of the Madras University was too unwieldy for the purposes of the examining type and too inadequate for the purposes of the teaching type. Judging with reference to the area of Southern India, the strength of its population and the languages spoken by it and considering the provision for university education in Western countries, there could be no question as to the desirability, nay the necessity, of having several universities in place of one. The only limitations upon the creation of new universities, whether of a regional type or of a more comprehensive character, are those imposed by finance, or the available supply of cultured men to participate in and carry on the administration of the university. While difficulties of this character form insuperable impediments to the creation of new universities in the Madras Presidency, there was no reason to apprehend that they would constitute a serious obstacle to a university located in the headquarters of the premier Indian State in Southern India. The example of Mysore and the policy of the new Madras University Act have set the Travancore Government seriously thinking of the formation of a university to subserve

the needs of the Kerala region. There is reason to hope that the University of Travancore may also come into existence in the near future.

The reasons for the multiplication of universities are the extension of educational facilities and the adaptation of the character of education to the varying requirements and ideals of different regions. In bringing the University of Mysore into existence it was the intention of your Government not to reproduce the pattern of the University of Madras to which the colleges were affiliated but to start a residential and teaching university with special features of its own. The payment of greater attention to the vernaculars, the promotion of the corporate life of the university, the institution of extension lectures and of a Publication Bureau were intended to be some of the new features of your university. The reduction of the university course by a year and the corresponding extension of the high school course by a year was one of the important features of this university. In introducing this change this university anticipated in some measure one of the important recommendations of the Calcutta University Commission. One of the main defects noticed by the Sadler Commission in the system of high school education in India was that the

course of instruction provided in the secondary schools was an inadequate foundation for the university and that the Intermediate classes of the colleges were making an inefficient attempt to supplement the instruction provided by the secondary schools. They recommended that this duty of supplementing the instruction furnished by the secondary schools should be transferred to Intermediate colleges and that the length of the ordinary degree course of the university should be reduced to three years. In providing for a year's course in your collegiate high schools as a preparation for entrance to the university the object evidently has been to maintain the length of the period required for the university degree at four years from the completion of the secondary school course. Judging from our experience of the secondary schools and Arts colleges in Madras, the recommendation of the Sadler Commission appeared to me to be thoroughly justified, even though it increased the length of the period required for an ordinary degree to five years. In view of the unsatisfactory nature of the training afforded by our secondary schools and in view also of the fact that the Intermediate course is a preparation and a starting point for several professional courses, the course of two

years at an Intermediate college or institution would appear none too long for the purpose it is intended to fulfil. The experience of Mysore with regard to the working and results of the collegiate school course must be of considerable value and interest to the educational authorities in the Madras Presidency and other parts of British India. In regard to the other objects set forth as the special features of the university, I presume that they are being attained in gradually increasing measure. There is evidence of original work being done both in the Science Department and in the Department of Kannada Literature and the activities of the Publication Bureau seem to have been maintained, notwithstanding the restriction imposed by temporary financial stringency. The number of students on the rolls of university colleges during the last year is said to have been a little over a thousand. The deficiency in the strength of the colleges as compared with those in Madras need not cause any dissatisfaction, as it permits of greater attention to individual students and closer personal intimacy between the teaching staff and the students. The success of the university is not to be judged by the numbers of its students or merely by the results of the public examinations. Quality, not

quantity, should be the aim of all genuine university work. The facile task of suggesting new lines of activity and new developments is superfluous in the case of a university under the guidance of a distinguished and versatile scholar like your Vice-Chancellor who is thoroughly familiar with the requirements and ideals of modern universities. The task would also be otiose, as all ambitious schemes are stranded on the shoals of finance. Many things might be suggested in the way of opening new professional colleges, new departments of the Arts and Science Faculties, art schools, art galleries and museums, providing facilities for research work in various departments, popularizing knowledge by courses of extension lectures and publishing original works and translations. But all such schemes are severely limited by financial considerations and I have no doubt that the Government of this State would only be too glad to initiate new lines of work if they were in a position to provide more funds. The expenditure on university education by the Government of Mysore in proportion to its finances is perhaps too low. There are no theoretical limits to the expenditure of money on university education. The authorities of the University of Liverpool with their annual income

and expenditure of over £230,000 complain of inadequacy of funds. The University of Chicago spends over 3 million dollars a year and the Harvard University which spends more than 5 million dollars per annum would like to spend much more. Before starting work on new fields it would be rather desirable to consolidate the work already undertaken in the different branches of learning in which university education is now provided and see that the institutions now in existence discharge their functions as efficiently as possible. It is only six years since the university was started, but short as the period may be, there is no ground for dissatisfaction with the work so far accomplished. Our opinion as to the progress in education made in this country must necessarily be determined by the ideals we entertain as to the purpose of education. I doubt whether there has been really any serious difference of opinion on this point among the people or between the Government and the people. The ideals of a course of university education must be to train the mind, character and physique of the students, so that they may develop their faculties to the fullest extent, to impart culture and breadth of outlook, to inculcate patriotism and the duties

of citizenship, to enable them to raise the level of national efficiency and national welfare and to contribute to the advancement of knowledge. These ideals may or may not have been realized by our universities. The methods pursued may have been faulty and the objects may have been but very imperfectly attained. The political ferment in India has directed men's attention to the question of education among others and the desire for national education has often taken curious shapes and led to a movement for a boycott of schools and colleges maintained or supported by the Government. There can be no doubt that the movement has been inspired rather by a destructive spirit than by any sound conception of the aims and methods of education. The problem of national education is so large that it cannot possibly be solved except by the use of State funds. There need be no qualms of conscience about resort to institutions maintained or supported by the State when the funds are raised by taxation from the people themselves. As put by a recent nationalist writer on this subject, "Is it the language which is the medium of instruction which makes it national or the agency through which it is imparted or the agency which controls and regulates it or the books which are taught or the standards and

ideals which underlie it?" If the level of national efficiency and well-being is to be raised, India cannot afford to cut herself adrift from the currents of modern thought and modern science and knowledge and the only sane course for her is to follow the example of the most powerful nation in the East and to learn and assimilate all that is good and worth knowing in the culture and civilization of the West. In the words of the writer already referred to, "It will be folly and madness to try to discourage the study and dissemination of European languages, European literatures and European sciences in India." Nor can India afford to resort to worn-out methods of education which, whatever value they might have possessed in ancient times, are no longer suitable to the new conditions. There are many among our people who consider that our schools and colleges are too expensive institutions for a poor country and that a reversion to the methods of the ancient *pathasalas* is necessary. Far be it from me to deny the good features of the old system of instruction by the *guru* to the *chelas* in his own house or in the village. But let us see what the old method involved. Taking, for instance, the life laid down by Apastambha for a student, it was a life of more than Spartan

severity, of asceticism and aloofness from the world. The mind of the student was looked upon as a wayward thing to be crushed by an iron discipline and drilled into conformity rather than as a tender plant requiring the most genial surroundings and influences for its nurture and growth. The psychological problems of the juvenile mind were unknown and the theory of education was that knowledge should be poured into the mind to be retained and reproduced when necessary. As a preparation for the world and the struggles of life, and its temptations and dangers, as a means of cultivating initiative, resourcefulness and a spirit of enterprise, as an instrument of education in the amenities of social life and the knowledge of human nature, the system was bound to fail. The value of the moral discipline it imparted was discounted by the fact that it was adapted not to the ordinary surroundings of society in which the student would have to play a part in after-life but to highly artificial surroundings of a monastic character. The classical story of Rishyasringa who succumbed to temptation at the first contact with the world of realities is an excellent illustration of the liability to a breakdown of the moral discipline enforced by the old system. Can there be any doubt

that the English public school produces a much more virile character, with habits of self-reliance and independence or that it instils the spirit of patriotism, or promotes a love of sports and athletics and a spirit of adventure and of courage, or equips the students with a considerable knowledge of human nature and society. The *Gurukula* at Kangri is perhaps the only institution which is modelled upon the old system of *guru* and *chela* and which also seeks to impart some of the elements of Western knowledge. But to the extent that it enforces monastic ideals, it must be held that the training given by the institution is ill-adapted to modern conditions of life. That some of the objects aimed at by the *Gurukula* system are worthy of praise cannot be denied. I am aware that the *Gurukula* at Kangri has elicited tributes of apprecation from various quarters, European and Indian, as an attempt to preserve what is good in the ancient methods of education. The spirit of reverence and devotion to the teacher, the vow of chastity, the love of simplicity and the habit of self-control are traits worthy of admiration, but we must not suppose that these virtues cannot be acquired in schools conducted according to Western methods or acquired at too heavy a price. Even taking the

ancient ideals of education at their best, it may fairly be said that their tendency on the whole was the promotion of respect for authority rather than the encouragement of intellectual freedom. We know that in the field of metaphysical speculation no country in the world has produced more independent and fearless thinkers than India. We know also that even in the case of the Vedas, the infallibility of which is an article of creed in the orthodox world, they have been eviscerated by interpretation by the Mimamsakas on the one hand and by the Vedantins on the other, till we have only a sheil of formal ritualism and a nucleus of a Parabrahma left behind. Generalization has its dangers but very general statement must be understood subject to qualification. There can be no doubt in the mind of an impartial investigator, that the inculcation of submission to authority is a characteristic of the national system of education in India. In fact, it is one of the precepts to be observed by a pupil that he should not contradict his teacher.

The sphere of education is not the only one in which there is a conflict between the ideals of the old world and those of the modern. In many an other department of our social and intellectual life there is a similar conflict of ideals between

the East and the West. Conflicts of this character between old and new ideals, between authority and freedom, between religion and science are not peculiar to this country. They have been experienced in the West also and they have been or are being solved in some way satisfactory or otherwise. The peculiarity about the conflict of ideals in the mind of the educated Indian of the present day is that it is not a case of collision between ideas of the same or similar national origin, but a collision between the indigenous culture of the land and the foreign culture of the West. Patriotic, historical and evolutional considerations enter the arena and affect the issue. The complete adoption of the Western ideal looks like treachery to one's own country and disloyalty to the spirit of the nation and of the past. On the other hand, a stolid adherence to old ideals and a refusal to assimilate what is best in the culture of the West is a handicap in the struggle for existence. Some adjustment is obviously necessary between the old and the new ideas if we are to adapt ourselves to the changed conditions of the world and maintain our national individuality. Not merely is such adjustment necessary in the interests of our national progress, but it is equally required in the interests of individual happiness and peace

of mind. Even among the educated classes, there are some who give no thought to the claims of these divergent ideals, who are assailed by no doubts as to the wisdom of the past and who fail to realize the demands of the present. A spirit of placid conservatism is the attitude of one section of our countrymen. A contemptuous disregard for the past and an unqualified admiration for the whole and every item of Western civilization is the attitude of another section. Yet another section leads a life of double personality, leading two parallel lives without feeling the necessity for any logical coherence of beliefs. It was remarked of a certain class of persons by Herbert Spencer that when they entered their oratory they closed the door of their laboratory and when they entered their laboratory they closed the door of their oratory. There are, however, large numbers of us who feel the force of the impact between the old and new ideas and the only solution which is practicable is for each one of us to attempt a synthesis to the best of our lights between the divergent ideals, to follow a policy of eclecticism and pick up whatever is best in the culture of the East and of the West and is best calculated to improve the efficiency of the nation and the happiness of its citizens. In illustration of my

remarks, I may be permitted to refer to a few such cases of divergence between the old and the new ideals. Let us take, for instance, the ideals of marriage in ancient India at their best and the relations between the husband and the wife. Marriages were settled for the bridegroom and the bride and the choice of the parties themselves counted for little or nothing. Exceptions were no doubt allowed in the case of the Kshatriyas who were permitted to contract a marriage in the *Gandharva* form, but the ordinary rule was for the parents to choose and for the children to accept the decision. This practice has continued to the present day and the objectionable features have assumed much larger dimensions. With the growing practice of postponing the age of marriage both on account of the difficulty of securing bridegrooms and the growing desire to give some education to girls, it is obvious that the wishes of the parties themselves to a marriage must be allowed a very much larger share in the transaction, even if they are not allowed to become the decisive factor. Take again the duties of the wife to the husband as laid down in our epics and in the Dharma Shastras. The husband was the lord and master, if not also a God to his wife and even a wife like Sita was said to have

followed her husband as his shadow. However flattering and acceptable the ideal may be to the majority of the male sex, is it likely to be acceptable to the educated woman anxious to secure opportunities for self-realization and development, who cannot blind herself to the faults and the defects of her husband and is unable to detect any presence of the divine element in him and recognizes perhaps all too painfully that he is a mere man with perhaps more than his share of the faults of his sex? Is not the ideal of a partnership on equal terms more consistent with the dignity of woman, more conducive to mutual esteem and good-will and domestic happiness and more likely to be in accord with the changing conditions of the future?

Let us turn again to the question of filial obedience. No nobler picture of filial obedience has ever been conceived than that of Rama who undertook an exile to the forest for a term of fourteen years to enable his old father to redeem a thoughtless promise made to a young wife. As a Hindu myself I feel fascinated by the picture and feel that no true Hindu can resist the appeal of this charming picture. I know also that our literature loves to teach Dharma by the use of hyperbolic stories; but is it an ideal which

is practicable at the present time, or can it be laid down that it is the duty of a son to obey every unreasonable wish of his father, provided it is not sinful? We have another illustration of an extreme case in the story of Parasurama who beheaded his mother at the instance of his father, because she had admired the passing form of a Gandharva. Let us take again the old ideal of a Hindu joint family with the mutual obligations of the members to support each other and the training it afforded in habits of altruism and its comparative disregard of the rights of the female members of the family. To some, it may appear as a satisfactory compromise between extreme individualism and the communistic principle. On the other hand, is not the Dayabhaga system of law which abolishes survivorship a more satisfactory scheme and is it not better adapted to modern conditions? Turning to the political sphere, is not the theory of the divine right of the sovereign which is laid down in our Dharma Shastra and which has been asserted or recognized in other countries as well, an outworn fiction which can no longer serve any purpose in advanced countries?

Passing from the question of the double personality in the mental sphere of the educated

Hindu, let us cast a glance at the double life led by many an Indian inside his home and outside. There is a want of accord between the ideas and beliefs of the educated Indian and those of his womenfolk. Inside his house he leads a life of conformity to traditional practices and observances which have lost their meaning for him but still retain a hold on the women. He acquiesces with an air partly of amusement and partly of resignation, in their forms of worship, in their religious ceremonies and in their methods of nursing and bringing up children. He lacks the pleasures of intellectual companionship, but he sometimes feels that his women are the sanctuary of his religion and that they make up by their faith and devotion for his own want of religion, or of conformity. He has a vague fear that the idyllic atmosphere of his home may be disturbed by female education, but however charming it may be, it is rather an atmosphere of racial childhood. There is no other way to get rid of this double life than by the education of women, not necessarily on identical lines with that for men (except, of course, for those who intend to follow the learned professions), but on lines more appropriate to the sphere of their duties and functions at home and in society. The alteration required in the

higher educational courses for women will, I hope, engage the early attention of this University if it has not already done so. The defects in the existing system of education have all been pointed out in the Report of the Calcutta University Commission, a mine of educational experience and wisdom and the suggestions for improvement which it contains are practically applicable to the universities of Southern India quite as much as to Calcutta.

One of the most important functions of a university is the advancement of knowledge by the encouragement of original research. The only university which has so far provided facilities for research is the University of Calcutta. Thanks to the energy, zeal and far-sighted and broad-minded patriotism of Sir Asutosh Mukherji, the University of Calcutta has made provision for an elaborate scheme of post-graduate studies in a variety of subjects and the University College of Science has won a name for itself in the scientific world by the contributions of its professors and advanced students who are all Indians. In Mysore you possess the inestimable advantage of the best-equipped institute of science in the whole of India and graduates of Mysore who have got an aptitude for research can avail

themselves of the facilities of the Indian Institute of Science. The addition of new departments to this Institute cannot be beyond the resources of the authorities now co-operating in its mainteance and it may perhaps be a satisfactory and less expensive alternative to the university undertaking the encouragement of scientific research entirely on its own account. Whether there are any administrative or other obstacles to such a course, I do not know. Let us hope that the Iron Works at Bhadravati will prove a successful venture and create a demand for experts in mining and metallurgy and that the increased prosperity of the finances of Mysore will enable the Government to establish technical colleges in mining and metallurgy as well as other subjects of a regional character.

Attached to the University of Madras, training corps have been formed both in Madras and in Trichinopoly as part of the scheme of the Indian Territorial Force. The advisability of forming a similar university training corps in Bangalore and Mysore may well be considered by the Government, more especially as the presence of a large military force in Bangalore with its complement of officers should facilitate the necessary arrangements for instruction and training.

Of those who have taken your degrees to-day, some will probably think of prosecuting further studies of a specialized character, either with a view to acquiring professional knowledge or with a view to the attainment of a higher standard of knowledge in subjects already studied by you. Others will probably be obliged to think of some career and earn their living. Some of you, at any rate, may have discovered your special aptitudes and directed your studies accordingly and I hope you will all succeed in the careers to which you may be called. But whatever may be your special callings, you will have to discharge your duties as citizens of the State. Opportunities for participation in public life are daily expanding, whether in the sphere of local or central government, both in Mysore and in British India. The Constitutional Reforms which have been foreshadowed by His Highness' Government will open more largely the avenues of political life. The satisfactory discharge of your duties to the State requires the formation of sound opinion on public questions and the proper guidance of public opinion. Constitutional advances in the direction of popular government require and presuppose the education of public opinion. The average elector in any country and still more in

India is seldom sufficiently educated to form his own independent opinion on matters of public concern without assistance from those who are better qualified. If he is literate, he takes his opinions from the newspapers which fall into his hands. If he is illiterate, he has to depend upon the speeches of politicians which are open to his literate brethren also and upon second-hand accounts of the contents of newspapers. Opinions are largely swayed by the impressions received from these sources and by class or party interests. The responsibility of guiding public opinion which rests upon politicians and journalists can be adequately discharged only, if they make an honest and impartial endeavour to arrive at correct conclusions and in the interests of the country at large. Careful study of the question or policy at issue in all its bearings and the dispassionate examination of the arguments on one side and the other, and an honest attempt to understand the views of those who differ from you are the necessary preliminaries to a balanced judgment. The cultivation of a judicial frame of mind is essential to the formation of correct opinion, though it may disqualify you to some extent for partisanship. It may be urged that cultivation of the virtue of sobriety of judgment

may result in loss of driving power and render a man unfit for participation in party struggles whether as a leader or as a follower. The party system is an unavoidable and essential feature of the system of parliamentary government and it may also at times prove necessary as a preparation for the development of the parliamentary system. But even in this view the formation of sound opinions is not a superfluity, which can be dispensed with. The interests of the State will be better served, if opinions are carefully formed and compromises are subsequently adopted in so far as they may be necessary for the reconcilement of divergent interests or for carrying through measures of great importance. This is not the place or the time to go into any detailed discussion of the ethics of the party system, the exigencies of parliamentary government, or the extent to which an honest politician may agree to a compromise. Conceding that a certain degree of narrowness of vision is necessary to make a successful party politician, which do you consider should give more satisfaction, the consciousness of having endeavoured to serve the country or to serve the party?

Another piece of advice which I may give you is the necessity in political or other spheres

of public life of division of labour and concentration of your attention and efforts upon particular subjects. If you are a member of a political body, it will not be possible for you to acquire a mastery of all the subjects that may engage the attention of that body. If you are a public worker in the sphere of social welfare, it will not be possible for you to take equally active part in all social movements. While you may be ready to help many causes with your vote or your purse, you can acquire a close familiarity only with some of them. Division of labour is the essential condition of success in many spheres besides the economic.

Turning to the general public life of the country, one cannot help noticing with regret the signs of discord between rival creeds and communities and the bitterness of animosity which has been aroused in different parts of the country. The unity which was supposed to have been brought about between the Hindus and the Mussalmans three or four years ago rested upon the artificial foundation of a common hatred of British rule. A real rapprochment between the two great communities can only be achieved by an understanding and appreciation of each other's views and wishes and a spirit of mutual compromise and mutual reassurance. It is a remarkable

and gratifying circumstance that violent disputes between rival creeds are of comparatively rare occurrence in the territories of the Indian princes. The causes of this happy state of affairs deserve study. Inter-communal differences unfortunately flourish even in your Province and it will be the duty of the educated classes to find ways and means of composing or reducing these differences as far as possible. In the Report on Constitutional Reforms in Mysore a device has been suggested in the method of representation of the interests of minorities with the object of attaining this end. Should this experiment be sanctioned the working of it will be watched with interest in British India and its results may prove of value to us. Your political problems are not exactly of the same character as those in British India. While there must be several common features, you must not lose sight of one fundamental difference between the conditions here and those in British India. The ruler and the subjects belong to the same race here and your progress will not be retarded by external influences having their origin in vested interests or in any want of insight and sympathy.

Graduates of the University of Mysore, the degrees conferred upon you to-day are a

recognition of your successful completion of a course of liberal education, but they do not mark the close of your education. This is a process which you have to carry on through life on the foundations laid here. Your *Alma Mater* is still very young, but is none the less entitled to your affection and reverence. The life you will lead, the ideals you entertain, the service you render to your fellow-citizens and to the State will help to form traditions, which will bring credit to your University and will be cherished by your successors. In return for the benefits you have received from the University you owe her an obligation to advance the cause of learning and education. Do not allow your bread-winning pursuits to limit the horizon of your activities or to absorb all your time and thoughts. Let your ideals be a pure and unsullied life with noble aims and a wise harmony of plan, an unabating ardour for knowledge, the cultivation of varied intellectual interests and the uplift of your country. Disappointments there may be in the attainment of the objects we set before ourselves in life, but the consciousness of having striven for high ideals must bring a compensating measure of happiness. No higher ideal of culture, accomplishments, chivalry or service to the

country has been conceived than that embodied by the first of Aryan poets in his picture of Sri Rama. It is a most beautiful conception to my mind of perfect character or divinity as embodied in humanity. I have referred to Valmiki because I am more familiar with his work. But such ideals have their counterparts in other great religions also. Go forth into the world with the most cordial wishes of the University for your future welfare. May the Almighty shower His choicest blessings on you all and may the University of Mysore steadily expand its mission and its influence and take root in the affections of the people.

Address delivered at the Convocation of the University of Mysore by Dr. Annie Besant, D.L., on 29th October, 1924.

MAY IT PLEASE YOUR HIGHNESS: YOUR HIGHNESS, LADIES AND GENTLEMEN,

It is impossible for me to stand here to deliver the Convocation Address before the Chancellor and the University of Mysore, the first University founded in our own time by an Indian Ruler for the benefit of his people, without remembering that in the past of India the greatest and wisest of her monarchs found in the promotion of learning their noblest and most beneficent achievement, and saw in the foundation of a university the most enduring memorial of their thrones. Learning in India has ever been regarded as greater than wealth and rank, the fillet of wisdom as more worthy of reverence than the jewelled diadem of kings.

Who does not remember how the famous Madura Sangam, as highest honour, tied round the head of a greatly learned man a fillet—like the laurel crown of Greece—placed him on a platform supported on poles, borne on the shoulders of men of learning, sometimes a king among them, and carried him in procession along

Dr. Annie Besant, D.L.

the royal roads? In these days in which Indian women are recovering their ancient position, it may be worth while to note that not only do we come across the names of learned women, but that, as Professor S. Krishnaswami Aiyangar tells us :—

A ruler of Tanjore, poet, musician, warrior and administrator, did extraordinary honour to a lady of the Court by name Râmachandrâmbâ, who composed an epic on the achievements of her patron, Raghunâtha Nâyaka of Tanjore. It appears she was a poetess of extraordinary powers, who could compose with equal facility in eight languages, and was accorded the honour of Kanakaratna Abhisheka (bath in gold and gems). She was, by assent of the Court, made to occupy the position of the "Emperor of Learning," *Kavita Sarvabhauma*.*

That such honour was no ephemeral thing in India we may see if we recall the scene in the Royal University of Vikramasilâ, ten centuries later (founded by King Dharmapâla of Gauda). When the University had gathered together to lend their Principal to Tibet, to bring about a revival of Buddhism there, the Tibetan envoy describes the waiting, and is eager to see the Sage, and he enquires whether one venerable Lâmâ

* *Calcutta Review.* "How Learning was honoured among the Ancient Hindus," by S. Krishnaswami Aiyangar, January 1922, p. 49.

after another is not he. The Râjâ came "and took an exalted seat," but no monk rose to greet him. "When all the seats were filled up, there came Jovo Atisa, the Venerable of venerables, in all his glory, at whose sight the eyes felt no satiety."*

Thoroughly do I believe the maxim, spoken by Professor Sidgwick to his University undergraduates: "If you would know what England can do, you must know what England has done in the past." To you I would say: "If you would know what India can do, you must know what India has done in the past." You have here, in the shaping, a young University, to be moulded by Indian Ruler and Indian men of learning into what shape they will. Will you, I venture to ask you, make it only a copy, an imitation of Western Universities, or will you lift your eyes to the universities born on the Indian soil, breathing the Indian air, nourished by Indian traditions, and then set an example so inspiring that every great Indian State shall follow the example that you set, the example of the Ashramas and Sangams of the Hindu, the

* *Indian Pandits in the Land of Snow*, by Sarat Chandra Das, quoted in the *Vishva-Bharati Quarterly*, April 1924, pp. 58-59.

Vihâras of the Buddhist, the Madrasahs of the Muslims?

Even in such a record as *The Encyclopædia Britannica*, may be found an acknowledgment of the value of indigenous education in India, though not recording the splendour of its achievements. After mentioning the fact that "the existing system of education in India is mainly dependent upon the Government, being directly organized by the State, at least in its higher departments," the writer proceeds:

At no period of its history has India been an altogether unenlightened country. The origin of the Deva-Nâgari alphabet is lost in antiquity, though that is generally admitted not to be of indigenous invention. Inscriptions on stone and copper, the palmleaf records of the temples, and, in later days, the widespread manufacture of paper, all alike indicate not only the general knowledge, but also the common use of the art of writing. From the earliest times the caste of Brâhmanas has preserved, by oral tradition as well as in manuscripts, a literature unrivalled alike in its antiquity and in the intellectual subtlety of its contents. The Muhammadan invaders introduced the profession of the historian, which reached a high degree of excellence, even as compared with contemporary Europe. Through all changes of Government vernacular instruction in its simplest form has always been given, at least to the children of respectable classes, in every large village.

On the one hand, the Toles, or seminaries for teaching Sanskrit philosophy at Benares and Nadiya, recall the schools of Athens and Alexandria; on the other, the importance attached to instruction in accounts reminds us of the picture which Horace has left of a Roman education. Even at the present day, knowledge of reading and writing is, owing to the teaching of Buddhist monks, as widely diffused throughout Burma as it is in some countries of Europe. English efforts to stimulate education have ever been most successful, when based upon the existing indigenous institutions.*

This is too much forgotten. Therefore, I ask you to wander with me for a short space in the forests of the Ashramas, the exquisite gardens of the Vihâras, and let us see whether they do not present something that we may learn to utilize. We may consider the higher education in Ancient, Middle and Modern India, the Vaidic, the Buddhistic and the Muslim periods.

Dr. Rabindranath Tagore has, in his *Tapovana*, a striking passage on learning in Ancient India:

A most wonderful thing that we notice in India is, that here the forest, not the town, is the fountain-head of all its civilization.

Wherever, in India, its earliest and most wonderful manifestations are noticed, we find that men have not come into such close contact as to be rolled or fused into

* *India*, p. 384, col. 1.

a compact mass. There, trees and plants, rivers and lakes, had ample opportunity to live in close relationship with men.

In these forests, though there was human society, there was enough of open space, of aloofness; there was no jostling. Still, this aloofness did not produce inertness in the Indian mind; rather it rendered it all the brighter. It is the forest that has nurtured the two great Ancient Ages of India, the Vaidic and the Buddhistic.

As did the Vaidic Rishis, Lord Buddha also showered His teaching in many woods of India. The royal palace had no room for Him, it is the forest that took Him into its lap. The current of civilization that flowed from its forests inundated the whole of India.*

The Hindu Age.

It may be pointed out that the supreme literature of India, the Upanishads and the Brahma Sutras, are said to have been taught by sages and studied by reverent pupils, in these forest depths. For that supreme literature cannot be understood in its deepest meanings except with the aid of meditation and the discipline of the Râja Yoga. A teacher would give an aphorism, say, to his pupil, and send him away to meditate on it, and to bring back the result to

* *Vishva-Bharati Quarterly*, p. 64, April 1924. This is a most delightful and instructive Magazine for all lovers of India.

him, when he had reached a definite understanding thereof. The well-known story of Indra Deva and the Devas and Asuras may serve as an illustration. Such exercise drew out the latent powers of the student, and may explain the profundity of thought of the great Teachers of the Past. They were not concerned with explaining a difficulty, but with stimulating the intellectual powers of their pupils, so that these themselves might overcome it. The modern fashion of pouring well-digested facts, with lucid explanations of their inter-relationships, into the brains of the students tends to produce clever superficiality and success in the examination room, but does not conduce to original thinking and deep knowledge. (The hint may be worth considering in modern Universities.) Even after the forest was no longer used, Indian Universities were ever built in scenes of natural beauty, surrounded by lovely gardens, fragrant with blossoms and shady with trees, surrounded by a high wall, with guarded gates. The site of an insignificant village may sometimes be selected, because of its beauty. Thus Nâgârjuna (*Cir.* 300) with his pupil Ârya Deva is said to have visited a then insignificant village on a beautiful site south of Patalipura, and this led to the

foundation of the great Vihâra of Nâlandâ by Ârya Deva, later in this fourth century of the Christian era. The influence of natural beauty on the development of the mind is little thought of now-a-days, when a Civic University is founded in Birmingham, in Leeds, in Manchester.

The number of students attached to an Ashrama or Vihâra, in Ancient or Middle India sometimes surprises one. But in a forest there was plenty of room, and in the Vihâra, the spaces were large; one courtyard in the University of Vikramasîlâ accommodated 8,000 people. Kâlidâsa speaks of Kanva, the sage, as Kulapati, *i.e.*, a sage who feeds and teaches 10,000 students. It may be well to remember that studious adults would long remain as pupils of a much-respected sage, giving their time to meditation and profound philosophical study, and also to helping the Guru with the younger pupils. In *The Modern Review* (August 1923, p. 216), there is a paragraph under the heading, "A University in the Shakuntala," noticing a paper in *To-morrow* by Mr. R. G. Kulkarni, who draws attention to this name of Kulapati, given to Kanva, and says:

> The original study of the *Mahabharata* gives a graphic description of Kanva's Ashram. It is plainly stated therein, that thousands of sages were seen in the Ashram

by King Dushyanta, engaged in the study of different lores and sciences. It, therefore, clearly follows that the term Kulapati is not without its meaning in the play, and that the Ashram really consisted of not less than ten thousand students coming from different parts of the country.

It would be extremely entertaining to the imagination to try to depict a mental picture of an educational institution that consisted of ten thousand students, all bright, pure, inspiring faces, living together, learning together. Even such a big number in an educational institution was not a novelty in Ancient India.

It may also be remembered that the periods for the full study of the three *Vedas* were very long, and that the method of teaching alluded to above made little inroad on the time of the Kulapati. It is stated that the number of pupils to be taught by one professor was limited to five hundred in some universities. Again, much time was devoted to learning by heart. A student took up one or more branches of study, as a Brâhmana would take up one, two, or three *Vedas*, and he had to commit to memory the whole book, or books, which he studied. You will remember the astonishing feat of Pandit Vâsudêva Sârvabhauma, the head of the Nadiya University; the University of Mithilâ was the only happy possessor of a text-book of Nyâya,

and refused to allow it to be copied for the benefit of another university. So the great Pandit went as a student to Mithilâ, learned the whole text-book by heart, and returning to his own University, he set up a first-rate College for the study of Nyâya instead of the unsatisfactory one existing until then.

It may also be remembered how Suta was begged to visit the great gathering of those who sought his learning in the Naimishâranya, and, how many of the Vaidic treatises bear the affix, showing that they were studied in forests.

Among the Homes of Learning in Ancient India, the Sangams of the South demand notice. The Sangam is evidently the Sangha of Northern India; we find the word Sanghârâma applied to Buddhist monasteries, all of which were practically either schools, colleges or universities. Hiouen-Tsang mentions that there were one hundred Sanghârâmas in Kashmir with five thousand monks. The Buddhist monks were both teachers and students, and this seems to have been usual in Buddhist Vihâras everywhere; in Burma, elementary education is still given in the monasteries. The boy for the time is a Bhikshu. The residence for long periods in Monasteries and Sangams was due to the deep

desire for knowledge which is ingrained in the Indian temperament, and also to the high honour paid to learning. I have already referred to the interesting article in *The Calcutta Review* of January 1922 by Professor S. Krishnaswami Aiyangar who is so high an authority on Tamil Land. He rightly says that "if at times we come upon references which lead us to the inference that learning, as such, was held in extraordinarily high veneration, the explanation is clearly to hand that that veneration was in proportion to the labour and single-minded devotion that it called for in its acquisition." Learning was sought for love of learning and not for collateral advantages such as making a livelihood.

Dr. Aiyangar proceeds by summarizing the traditional account of the famous three Sangams of Madura, of which the first was said to have lasted for 16,149 years, the second 3,700, and the third 1,850. It is by no means impossible that the institution lasted through the periods named, and that specially brilliant assemblages were regarded as marking a literary age. (I should add that Professor Aiyangar regarded the terms mentioned as "fabulously long", so he must not be credited with the above remark.) He comes

to a view which appears to me to be correct and very important, as implying a high standard of critical culture and a wide extension of general education. He writes:

> There are two features with regard to these assemblies that call for special remark. The first, the academies were standing bodies of the most eminent among the learned men of the time in all branches of knowledge. The next, it was the approval of this learned body as a whole that set the seal of authority on the works presented to it (p. 43).

In fact, the Madura Sangam held in the Tamil Land a position closely resembling that held by the Academic Française in France. A French book which receives its imprimatur is accepted by the whole literary world. Similar assemblies, the learned professor says, existed in other parts of India, and they seem also to have exercised the function of examining bodies.

Dr. Aiyangar, in a learned work on the Southern India's contributions to Indian culture, remarks:—

> The main source of information for the period previous to the rise of the Pallavas into importance is Tamil Literature, of which we have a body with a character all its own. This body of works is known among Tamil scholars by the collective designation, "Sangam Works". This designation assumes the existence of a body, of an academy, of scholars and critics, whose

imprimatur was necessary for the publication of any work of literature in Tamil. The Tamil word "*Sangam*" is the Sanskrit "*Sangha*" and means ordinarily no more than an assembly. In this particular application, however, it means a body of scholars of recognized worth and standing in the world of letters, who were maintained by the contemporary kings and constituted themselves a board before whom every work seeking recognition had to be read. It is only when this body as a whole signified its approval that the work could go forth into the world as a Sangam work. It does not, however, mean that other works were not written and published. There are some which have come down to us, which do not appear to have gone before the Sangam. The function of this body seems, therefore, to be merely to set up a standard of excellence for works which aspire to the dignity of Sangam works.*

The Rishi Agastya is said to have been a member of the first and second Sangams, and to have written the authoritative grammar of the Age, the *Agattiyam*.

In a work entitled *Tamil Studies*, by M. Srinivasa Aiyangar, M.A., (1914)—an interesting and useful work, summarizing the early history of Tamil culture and civilization from original sources—the author frankly says that the

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* *Some Contributions of South India to Indian Culture*, by S. Krishnaswami Aiyangar, M.A., Ph.D. (pp. 9 and 10), 1923.

"topics have been treated from the standpoint of modern criticism, traditions and legends being discarded or utilized with great caution". Archæological researches have verified so many "traditions and legends" discarded in the boyish days of western science, that later writers treat them with more and more respect, though with suspended judgment, until they are duly verified by some bones or stones. Mr. M. S. Aiyangar thinks that the Rishi Agastya's date cannot be earlier than the 5th or 6th century B.C. (*loc. cit.* p. 238). Yet *The Manual of the Administration of the Madras Presidency* puts the meeting of Shrî Râmachandra with the Rishi Agastya at 2000 B.C., and mentions His great influence over an early Pândyan king, Kulashekara. Obviously the "date" of a Rishi cannot be fixed; the most that is possible would be the finding of a date, or dates, at which He temporarily appeared in our physical history.

Mr. Aiyangar has the following on the coming of the Rishi from the North:—

The life of Agastya is clothed in myth; but this much is certain that he was a Brâhman of North India and that he led the first colony of Brâhmans which settled in the Tamil Districts. According to another tradition, he was a member of the Sanskrit Academy at Benares, which was presided over by Vyâsa, the compiler

of the *Vedas*, and, after quarrelling with his colleagues there, he wended his way down to the Tamil country and established the first Tamil Academy at Madura. It is said that the Tamil language is indebted to him for its grammar. He was the first to introduce the worship of Siva and the science of medicine among the South Indian Dravidians. Though most of the Tamil works now existing on chemistry, physiology and medicine, which are commonly attributed to him, are pure forgeries, he might have been acquainted with the art of medicine and the first Rishi to teach it to the Tamil Nation.*

As to the 5th or 6th century B.C., the learned author must surely be aware that the date of King Solomon at the building of the Temple was, according to the canonical version of the Anglican Bible, B.C. 1014 to 1005. It is clear that King Hiram of Tyre traded with Tamil Land, because Tamil names are given, in the Hebrew *Bible*, to some of the things he bought. According to Dr. Sayce's statement in *The Hibbert Lectures of* 1887, there was trade between India and Babylon in 3000 B.C., so that *The Madras Manual* is far too late in putting the meeting of Shri Râmachandra and the Rishi at B.C. 2000.

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* *Tamil Studies*, by M. Srinivasa Aiyangar, M.A. p. 237, 1914.

A curious sidelight is thrown by Rao Saheb R. Krishna Rao Bhonslé, Joint Secretary of the South Indian Research Committee, which publishes a useful magazine. He tells a story from an ancient Tamil classic, showing that some system of shorthand must have been used by reporters at the Third Madura Tamil Sangam, A.D. 108. All those who sought its imprimatur had to read their work before them. Moved by some undesirable feeling, they arranged to have reporters concealed in the hall, where a poet was to recite his poem, and would claim certificate from them. The reporters took down the poem verbatim, and when the time came for decision they said that the poem was not original and produced their verbatim copy. The fraud was exposed by a Poet-Saint Idaikadar who went to the Sangam with the Poet Tiruvalluvar, author of the *Kural*, and his sister, the Poetess Anvai. The Poet-Saint introduced into his poem words imitating the cries of birds and beasts. The reporters could not take them down, and the fraud was exposed. The poem still exists, and is entitled *Oosi-murri*, *oosi* meaning stylus and *murri* breaking—breaking the reporter's stylus! The Tamil word for a phonographer is *oli* (sound), *yelluthu* (letter), *alan* (writer), but the reporters

had no signs for the animal cries.* Let us hope for the credit of the Sangam that this story is a libel; the *Oosi-murri* may have been a mere *jue d'esprit*. The mere fact of its existence no more proves that the Sangam acted dishonourably than the picking up of a piece of wood on the top of Mount Ararat proved, as the finder thought, that the Ark of Noah had come to an anchorage there, as the flood subsided.

The point that strikes one with amazement—amazement because of the entire ignorance about it in the West, except among scholars—is the astounding spread of literary and scientific learning in India from an unknown antiquity down to the middle of the eighteenth century. If possible, this wonder is increased when we turn to the famous University in the North on which we hear so many eulogies and of which we know so little, Takshashilâ, or Takkashilâ, Grecised into Taxilâ, that perished from 450 to 500 A.D., Taxilâ, whose bones have been unburied in the present century.

When we go northward and seek to find particulars of the famous Takshashilâ, we are

* *South Indian Research*, Monthly Supplement, December 1923, "Shorthand in Ancient India" by Rao Saheb R. Krishna Rao Bhonslé, M.R.A.S., pp. 12, 13.

sorely disappointed. We are told that "the remains of Taxilâ" are twenty miles north-west of the present Rawalpindi; that the valley is "a singularly pleasant one, well-watered by the rivers Haro and its tributaries, and protected by a girdle of hills"; that it was a very important city in "early times", being on the great trade route which used to connect Hindustan with Central and Western Asia; that in the days of Alexander it was a great and flourishing city; that the country was "thickly populated and extremely fertile". Nearly a thousand years afterwards Hiouen-Tsang found it still fertile with rich harvests, flowing streams and luxuriant vegetation. But the great University had gone. It is mentioned in the *Mahabharata*, in connection with King Janamejaya, who had conquered it, and his snake-sacrifice; it became part of the Persian Empire (521-485 B.C.), and between that and about A.D. 510, was occupied in turn by six more nations. "That Taxilâ at this time and during the centuries immediately following enjoyed a great reputation as a University town, famous for the arts and sciences of the day, is evident from numerous passages in the Buddhist Jâtakas; but apart from this fact nothing is known of its history prior to the invasion of

Alexander the Great." That is B.C. 326, when Ambhi is King of the town and makes submission to him. "The city was then very wealthy, populous and well-governed, and (that) its territories extended from the Indus to the Hydaspes." Apollonius of Tyana probably visited Taxilâ, for some of the details are corroborated by the excavations lately made. In 400 A.D. Fa-Hien visited the town, but says nothing about it, but his accounts of other places in that part of the world show that "the great Buddhist sanctuaries of the north-west were still relatively vigorous and flourishing." But the excavations have shown that

> the monuments of Taxilâ were wantonly and ruthlessly devastated in the course of the same century. This work of destruction is almost certainly to be attributed to the hordes of barbarian White Huns who, after the year 455 A.D., swept down into India in ever-increasing numbers, carrying sword and fire wherever they went, and not only possessed themselves of the kingdom of the Kinshâns, but eventually overthrew the great Empire of the Guptas. From this calamity Taxilâ never again recovered.

Such is the interesting account of Sir John Marshall, Director-General of Archæology in India. To his patient and persevering labours during four years, we owe the knowledge of the dead Taxilâ. His valuable *Guide to Taxila*,

published in 1921, gives us the skeleton of the wonderful body, once pulsing and thrilling with splendid intellectual life, life so strong and vivid that even its tradition still inspires those who would fain see in every great Indian State a University, which would do for the future what Taxilâ, Nâlandâ and Vikramasîlâ did in the past. And why not, since the descendants of some of the kings who founded them are still here?

Let us see, however hastily, what may be learned from the *Jatakas*.

In a very interesting article by Professor Radhakumud Mookerji on "Indian Education from the *Jatakas*," he gives a very useful extract from Jâtaka No. 252, showing how Princes went to Taxilâ:

> Once upon a time, Brahmadatta, the King of Benares, had a son named Prince Brahmadatta. Now kings of former times, though there might be a famous teacher living in their own city, often used to send their sons to foreign countries afar off to complete their education, that by this means they might learn to quell their pride and high-mindedness, and endure heat or cold, and be made acquainted with the ways of the world. So did this King. Calling his boy to him—now the lad was sixteen years old—he gave him one-soled sandals, a sunshade of leaves and a thousand pieces of money, with these words: "My son, get you to Takkasilâ, and study there."

The boy obeyed. He bade his parents farewell, and in due course arrived at Takkasilâ. There he enquired for the teacher's dwelling, and reached it at the time when the teacher had finished his lecture and was walking up and down at the door of the house. When the lad set eyes upon the teacher, he loosed his shoes, closed his sunshade, and, with a respectful greeting, stood still where he was. The teacher saw that he was weary, and welcomed the new comer. The lad ate and rested a little. Then he returned to the teacher, and stood respectfully by him.

"Where have you come from?" he asked.

"From Benares."

"Whose son are you?"

"I am the son of the King of Benares."

"What brings you here?"

"I come to learn," replied the lad.

"Well, have you brought a teacher's fee, or do you wish to attend on me in return for teaching you?"

"I have brought a fee with me," and with this he laid at the teacher's feet his purse of a thousand pieces.

The resident pupils attend on their teacher by day and at night they learn of him; but they who bring a fee are treated like the eldest sons in his house, and thus they learn. And this teacher, like the rest, gave schooling to the Prince on every light and lucky day. Thus the young Prince was taught.*

**Vishva-Bharati Quarterly*, October 1923, p. 227.

The learned Professor points out that "this extract introduces us practically to all the principal features of the education of the time." To go to Taxilâ is "to complete their education". The appropriate age for the University was sixteen: "The Prince of Benares is, as we have seen, sent to Takkasilâ for his studies with the modest equipment given him by his own royal father of 'a pair of one-soled sandals, a sunshade of leaves and a thousand pieces of money' as his teacher's fees, of which not a single piece could he retain for his private use. Thus the Prince enters his school as a poor man, divested of all riches." A very good thing for him, and likely, as the *Jataka* says of Princes, "to quell their pride and high-mindedness. Taxilâ seems to have held the place in Ancient India that Nâlandâ held in Middle Age India. The Professor says:

> The fame of Takkasilâ (Taxilâ) as a seat of learning was, of course, due to that of its teachers. They are always spoken of as being "world-renowned," being authorities, specialists and experts in the subjects they professed. And it was the presence of scholars of such acknowledged excellence and widespread reputation that caused a steady movement of qualified students drawn from all classes and ranks of society towards Taxilâ from different and distant parts of the Indian Continent, making it the

intellectual capital of the India of those days. Thus the various centres of learning in the different parts of the country became affiliated, as it were, to the educational centre or the central University of Taxilâ which exercised a kind of intellectual suzerainty over the wide world of letters in India (p. 228).

A good general idea of the education given may be gathered from casual references in the *Jatakas* which, as the Editor, Professor E. B. Cowell says, are "full of interest as giving a vivid picture of the social life and customs of Ancient India. . . They form in fact an ever-shifting panorama of the village life such as Fa-Hien and Hiouen-Tsang saw it in the old days before the Muhammadan Conquest, when Hindu institutions and native rule prevailed in every Province throughout the land.*

There are no less than 105 references to Taxilâ in these tales, shewing how it was recognized as the centre of high education; the sons of kings, princes and nobles were sent there, and paid fees; the sons of the poor also went there

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* Preface, pp. ix, x. I am using the six-volume edition, "translated from the Pâli by various hands under the Editorship of Professor E. B. Cowell," published at various dates. The numbers of the *Jātakas* are given, not the pages.

and paid by services, or by promises to pay later when they beg for their fees.

500 young Brâhmanas studied under one teacher (No. 97). This number is several times mentioned and was evidently the number of students placed under the charge of a single teacher. The students gathered firewood (No. 71). The journey thither, 2,000 leagues from Benares, was dangerous while passing through a great forest, inhabited by ogresses, but the safe journey round the forest was twice as long as passing through it (No. 96). A pupil is beaten for stealing sweets (No. 252). Youths of the Kshatriya and Brâhmana castes "came from all India to be taught the Arts" from a "world-renowned teacher"; the three Vedas were also taught by him (No. 353). A world-famed teacher preached the moral law to any one that he might see. . . . . But though they received it they kept it not (No. 356). A young Brâhmana of Benares, having acquired all the liberal Arts at Takkasilâ, and having attained to proficiency in archery, etc., (No. 374). The Arts taught at Takkasilâ included magic spells (No. 416). As soon as a lad of Benares "came of age", his father gave him a thousand pieces and sent him to study at Takkasilâ; thither he went,

and studied with an world-famed teacher, and became the chief pupil in a company of 500 youths; while the teacher was absent, the pupils were put in this lad's charge; when the teacher returned, he taught the lad "all branches of skill and learning" and "dismissed him with a great troop of followers" (No. 447). "Skill" is evidently the Arts—*shilpa*. Prince Junha of Benares studying at Takkasilâ, accidentally knocked down a man and broke his bowl. He picked up the man who asked the price of a meal as his bowl was broken. The Prince answered that he could not then give it, but when he became king in Kâshi, the man could come and ask for it (No. 456). Students were penniless as mentioned on p. 177. Outcastes were not admitted to the Academy, but two young Chandâlas, having suffered from their birth, disguised themselves as Brâhmanas and went to Takkasilâ where they studied law; they went with others, invited to a meal (rice porridge), and were discovered beaten and driven out (No. 498).

Mr. Bimala Charan Law, in his *Historical Gleanings*, has a short essay on "Taxilâ as a Seat of Learning in Sanskrit and Pâli Literature". He mentions that the King of Kosala and Jivaka, "the renowned physician", were students

there, the first generally for education and the second for medicine and surgery. The three Vedas were taught, but the *Atharva* is never mentioned in the Pâli *Jatakas*. He thinks the word *sippa* (*shilpa*) is used in "the comprehensive sense of learning"; but surely it is better taken in its usual meaning of Arts as the eighteen Vijjas would cover the branches of learning, and Arts are needed to include the use of the bow, the javelin, the finding of hidden treasure, magic charms, etc. Professor Radhakumud takes the word as Arts, and considers that it covers scientific and technical education. The latter also mentions military, medical and law schools.

The last great centre of Hindu learning that I have time to mention is Nadiya. The town of Navadwipa or Nadiya, a town about 70 miles north of Calcutta on the banks of the Bhagirathi, was built in 1063, and the College appears to have been founded about the same time. The town was taken in the Muslim invasion of 1203, but neither town nor Colleges suffered. It was a great centre of Sanskrit learning, the course of study including the Vedas, Vedângas, the six Darshanas, the Purva and Uttara Mimamsas, Yoga and Logic.

Mr. Shishir Kumar Ghose, in his work, *Lord Gouranga*, writes:

The one absorbing idea of all the respectable citizens was the acquisition of knowledge. The old and the young, men and women, among the higher classes, were constantly engaged in intellectual pursuits, as if there was no other business in the world. Wealth, politics, war, pleasures and amusements had no attraction for them. Fighting they abhorred as being the occupation of beasts of prey and unworthy of human beings. Gratification of the senses, they knew, debased the soul, and they had such an aversion for sensual pleasures that no liquor shop was permitted to be established in the city. It was considered disgraceful to hold office, even that of the Prime Minister of the King, an office-holder being likened to a dog.

In the opinion of the citizens, man was born only to acquire knowledge, which was the end and aim of human life. The student was the only being who could claim the title of man

The intense devotion to learning, by the majority of the citizens of Navadwipa, gave a peculiar character to the town, distinguishing it from any other city in the world. Students thronged everywhere. They filled the market-place, the streets, the bathing-ghats and the strand. They assembled in thousands at every convenient spot to hold literary discussions. When the students walked in the street they talked on literary subjects. Literary tournaments were held every day at every ghat of the city. And so earnest were the combatants that sometimes these tournaments ended in free fights, and

the defeated parties had to swim across to the other bank of the river to save themselves. Each student held a book in his left hand—that being his distinguishing badge to mark him out from others. It was his ornament, his friend and his strength, which secured for him respectful attention everywhere.

In each street there were several Toles (Colleges), and each College contained, according to *The Chaitanya Bhagabat*, hundreds and, sometimes, thousands of students. Says Thakur Brindaban, himself a citizen, a saint, a student, and an eye-witness: "Thousands every day came to the city from all parts of India, some to begin and some to finish their education, and thousands left every day after having obtained their diplomas."

This account reminds one of the description given of Alexandria in the days of the great controversy over the internal relations of the persons in the Christian Trinity. It was said that the controversy raged so widely that if you went into a shop to buy a piece of cloth, the shopman tried to discuss with you these relations instead of supplying you with his goods.

It will be noticed from the dates that Hindu and Buddhist schools taught side by side, and that the "Ages" are named with regard to the most famous seminaries of the time. So also in passing to the Mussalman Period, the older educational institutions continued, except for temporary destructions, in which Buddhism suffered most

from the Huns, and some were entirely blotted out.

In the villages, especially in the South, the little schools continued, as we shall see later, but these perished—save for a few feeble survivals even down to our own time—with the destruction of the village governments in 1816.

A wonderful feat of memory is told, which gave it the one college it lacked, one for the proper teaching of Nyâya. There was no available text-book; Nyâya was taught at Mithilâ, but the Bengali students were not allowed to make a copy of the text-book. So Vâsudeva Sârvabhauma went to Mithilâ to study Nyâya, and committed the whole text-book to memory. He then returned home and opened a college for Nyâya.* At that time the college contained a youth of wonderful intellect, Nimai by name. He was destined to become the glory of Nadiya, has been called the Avatara of Nadiya, known later as Chaitanya, or the Lord Gouranga. It is interesting to read that as late as in the year 1867, Professor Cowell visited this ancient College; he writes:

I could not help looking at these unpretending lecture-halls with a deep interest, as I thought of the pandits

* *Lord Gouranga*, by Shishir Kumar Ghose, p. XII.

lecturing there to generation after generation of eager, inquisitive minds. Seated on the floor with his "corona" of listening pupils round him, the teacher expatiates on those refinements of infinitesimal logic which make a European's brain dizzy to think of, but whose labyrinth a trained Nadiya student will thread with unfaltering precision. I noticed during my visit middle-aged and even grey-haired men among the students.*

As late as 1908, Mr. Ward found there 30 Toles and 250 pupils. Each school taught a single subject.

In closing this review of the Hindu Age, I may and that, with regard to both Hindu and Buddhist, it is the spirit which I would see revived, the attitude to life, not every detail of the outer rules: The veneration for learning, the taking it as a vocation, the simple life of the student, the loyalty to duty, the recognition of dharma. This, adapted to modern life, should be the ideal.

The Buddhist Age.†

Coming to the Buddhist Period, Nâlandâ University at once springs up before our eyes,

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* *Ancient Indian Education*, by Rev. T. E. Keay, M.A., p. 63.

† It must be remembered that the Hindu Period ran also concurrently with the Buddhist. They ran peaceably side by side.

Nâlandâ, visited by the three famous Chinese travellers, Fa-Hien, travelling in India from 399 to 414 A.D.; Hiouen-Tsang, from 629 to 645 A.D.; I-Tsing from 673 to 693 A.D., who lived in the monastery for ten years and gives a minute account of Buddhist observances in *A Record of the Buddhist Religion as practised in India*, etc., A.D. 671—695 (the dates of his leaving and his return to China) by I-Tsing, translated by J. Takakusu, B.A., Ph.D., 1896.

Nâlandâ was situated on the bank of Gangâ, to the south-east of Pâtalipura (now Patna), built by Ajâtashatru, and north of Râjagriha, his older capital of Magadha: Fa-Hien visited it in the 5th century before it was completed by King Bâlâditya, about the middle of the same century, the three kings before him having laboured at it successively, after it had been founded by Ârya Deva on the spot chosen by his Guru, Nâgârjuna, as noted on p. 162. Its architecture was splendid, its gardens beautiful. J. Talbhoys Wheeler says (quoted in an article on Nâlandâ by Rao Saheb Krishna Rao Bhonslé, in *South Indian Research*, pp. 55 to 57, January 1922):

The huge monastery was a vast University. Towers, domes and pavilions stood amidst a paradise of trees,

gardens and fountains.... Ten thousand Buddhist monks and novices were lodged and supplied with every necessity. All the inmates were lodged, boarded, taught and supplied with vestments without charge. They studied the sacred books of all religions. In like manner, they studied all the sciences, especially arithmetic and medicine.

This is confirmed by Hiouen-Tsang, in the translation by Stanilaus Julien, quoted in the same article:

The richly adorned towers were arranged in regular order, the pavilions decorated with coral appeared like pointed hill tops; the soaring domes reached to the clouds, and the pinnacles of the temples seemed to be lost in the mist of the morning. From the windows one could see the movements of the winds and clouds, and above their lofty roofs the sun and moon could be seen in conjunction. All around, pools of translucent water shone with the pearls of the blue lotus flowers; here and there the lovely kanaka trees hung between them. In the different courts, the houses of the monks were each four storeys in height. The pavilions had pillars ornamented with dragons, and beams resplendent with all the colours of the rainbow, rafters, richly carved columns ornamented with jade and richly chiselled, and balustrades of carved open work. The lintels of the doors were decorated with elegance, and the roofs covered with glazed tiles of brilliant colours, which multiplied themselves by reflection, and varied the effect at every moment in a thousand manners (p. 55).

Later kings erected Vihâras outside its

surrounding wall, through which only one gate gave admission. This gate was guarded by a Dvâra Pandita, who asked the would-be student some difficult question, and he had to take himself off if he could not answer. In fact, it was what would now be called a Post-Graduate University. Within were six great ranges of buildings each four storeys high. The one which contained the library, said to be the largest in India, had nine storeys. It had one hundred lecture rooms. He mentions in his travels many other Vihâras, where "resident priests, having chambers, have their beds, mats, food, drink, and clothes provided without stint; in all cases, this is the same."* In those days and later it had some 10,000 monks. It was in the fullest sense of the word a University where all religions and sciences were studied, especially arithmetic and medicine. Dr. Macdonnell, quoted by Rao Saheb R. Krishna Rao Bhonslé says that in some subjects, "as Science, Phonetics, Grammar, Mathematics, Anatomy, Medicine and Law, attainment of Indians was far in advance of what was achieved by the Greeks." Little wonder that students travelled to Nâlandâ from Europe, as from all

* Quoted in *Civilization in Ancient India*, by Romesh Chandra Dutt, C.I.E., Vol II, p. 56, 1893.

parts of Asia. There was no attempt to discourage the study of the eighteen Buddhist schools, while the *Vedas* also were taught and discussed, as said by Mr. R. C. Dutt:

Buddhism had never assumed a hostile attitude towards the parent religion of India; and the fact that the two religions existed side by side for long centuries increased their toleration of each other. In every country, Buddhists and orthodox Hindus lived side by side. Hindus went to Buddhist monasteries and universities, and Buddhists learned from Brâhmana sages. The same kings favoured the followers of both systems of religion. The Gupta Emperors were often worshipers of Siva and Vishnu, but loaded Buddhists and Buddhist monasteries with gifts, presents and favours. One king was often a Buddhist and his son an orthodox Hindu; and often two brothers followed or favoured the two religions without fighting. Every Court had learned men belonging to both the religions, and Vikramâditya's Court was no exception to the rule.*

Mr. Dutt, in the book above quoted (p. 148), summarises the account given by Hiouen-Tsang of Nâlandâ as a seat of learning:

Our traveller now came to the great Nâlandâ University, if we may call it by that name. The monks of this place, to the number of several thousands, were men of the highest ability, talent and distinction. "The countries of India respect them and follow them. The day is not sufficient for asking and answering profound

* *Civilization in Ancient India*, R. C. Dutt, p. 127.

questions. From morning till night they engage in discussion; the old and the young mutually help one another. Those who cannot discuss questions out of the *Tripitaka* are little esteemed, and are obliged to hide themselves for shame. Learned men from different cities, on this account, who desire to acquire quickly a renown in discussion, come here in multitudes to settle their doubts, and then the streams (of their wisdom) spread far and wide. For this reason some persons usurp the name (of Nâlandâ students) and in going to and fro receive honour in consequence."

Dr. Fergusson justly remarks that what Cluny and Clairvaux were to France in the Middle Ages, Nâlandâ was to Central India, the depository of true learning, the centre from which it spread over to other lands.

It is noted above that medicine was much studied, and Mr. Dutt remarks that

medicine appears to have made great progress in the Buddhist Age, when hospitals were established all over the country. The great writers on Hindu medicine, Charaka and Sushruta, lived and wrote in the Buddhist Age, but their works seem to have been recast in the Purânic Age (p. 123). But it was in astronomy that the most brilliant results were achieved in the Buddhist Age. We have seen before that astronomical observations were made as early as the Vaidic Age; and that early in the Epic Age the lunar zodiac was fixed, the position of the solstitial points marked, and other phenomena carefully observed and noted (p. 119).

At Nâlandâ, the five great Siddhântas were studied, and its curriculum included Logic,

Grammar, Philosophy and Metaphysics, History, Arithmetic, Geometry, Astronomy, Sanskrit, Pâli, Music and Tântrik Medicine. I mention this last, because I am inclined to think that the interest taken in the Tantras put a close to its splendid existence. No one can read I-Tsing's laborious and minute work without recognizing that little attention was paid to the Lord Buddha's perfect Ethics and his superb Philosophy. I-Tsing's account is all about minute and mostly unimportant sittings, and walkings, and gestures. There is no life, no inspiration. At his time, there were only 8,000 monks there, and the great University was growing weak. Its place was taken by the "Royal University of Vikramasîlâ," founded by King Dharmapâlâ of Gauda in the 8th century A.D. He gave it four groups of 27 monks, each group belonging to a separate sect. Its high wall had six gates, and each opened the way to a College, if the applicant could pass the Dvâra Pandita who protected the gate and was the head of the College. An interesting article on the University appears in the *Vishva-Bharati Quarterly* of April, 1924, from the pen of Professor J. N. Samaddar. Mr. Phanindranath Bose says, on the authority of Lama Târânâtha, it stood on a precipitous hill in Magadha on the

bank of Gangâ, in what is now known as the District of Bhagalpur. The University flourished for four centuries, and was destroyed with those of Nâlandâ and Odantapuri, of which last little is known; it had 1,000 monks and it is said that many students came to it from all parts of India. These three Universities perished in the Muslim invasion of 1199, and Mr. Samaddar remarks, in the article above quoted (p. 62), that by the destruction of these three Buddhist seats of learning, "Buddhism received a blow from which it has never been able to recover." And the monastery of Jâgaddala, founded by King Ramapala, King of Bengal and Magadha, 1084 to 1130, in his new capital, Râmâvati, at the beginning of the twelfth century in Northern Bengal, became a centre of culture in Bengal, but only lived for a century, wiped out by the Muslim invasion in 1203. Then also perished the University of Kartayâ. Tolerance is shown in the various Universities; in Tâmralipli, at the mouth of the Hugli, there were twenty-two Vihâras and hostels for students, and these were filled by Brâhmanas and Buddhists.

The Muhammadan Age.

When we turn from the Hindu and Buddhist Temples of Learning to the Muhammadan work

for and influence on Education in India, we must remember the splendid record of Islam in Arabia, its birthplace, its great University at Baghdad—destroyed by the same White Huns who devastated Taxilâ—the University that created Moorish Learning, and sent the torch of Science in the hands of the Moors to Spain. The Huns were enemies of all learning and of all culture, and almost succeeded in murdering the young civilization of Europe, slowly rising since the decay of Greece and the fall of the Roman Empire. It is well known that the great Prophet of Arabia set the ink of the scholar above the blood of the martyr, and that Ali, his beloved son-in-law, was the strong patron of learning.

The early raids from the North, which devastated, were succeeded by invaders who came to stay and who used discretion in their destruction. Even the fierce raider, Mahmud of Ghazni (A.D. 1000-26), fostered education in his own country, but he was a fanatical hater of images, and much of his destruction of schools was probably due to the fact that they were usually attached to temples. [The great authority on Muslim Education in India is Narendranath Law, whose *Promotion of Learning in India during Muhammadan Rule (by Muhammadans)*

is a splendid monograph, and may be taken as authoritative. For his learning, the fact that he was a Premchand Roychand Scholar may be taken as a guarantee. It was published in 1916.] It is customary for every Masjid to have in an elementary school attached to it, the Maktab, but the Muslim College is the Madrasah. Sultan Mahmud had a University in Ghazni, with a fine library and museum, and it was rendered famous by the presence of the poet Firdausi, and his Court was crowded with learned men. But he was only known in India as a raider of great ferocity. Muhammad Ghori, of the House which overthrew that of Ghazni, was the first to settle in Delhi (1192), and it became a resort of learned men. It was his lieutenant who destroyed Vikramasilâ, leaving not "a single scholar alive" (p. 20), and other great seats of learning shared its fate. His name, Bakhtiyâr Khilji, remains for ever infamous. A Sultânâ Raziyah was a patron of learning, following the example of her father Altamash, who built a Muslim College at Delhi between 1210 and 1236. Amid changes of dynasties and wars, learned men shone out from time to time, like Sultân Firuz (1351—1388), a scholar himself and a patron of learning. He brought two Ashoka pillars to Delhi instead

of destroying them—a mark of grace, shewing a welcome taste for Art. He says of himself :—

Among the gifts which God has bestowed upon me, His humble servant, was a desire to erect public buildings. So I built many Masjids, Colleges and Monasteries that the learned and the elders, the devout and the holy, might worship God in these edifices and aid the kind builder by their prayers. The digging of canals, the planting of trees and the endowing with lands are in accordance with the directions of the Law (p. 57).

He also repaired buildings that had fallen into decay like the Jami Masjid of old Delhi. He built at Firûzâbâd the Firûz-Shâhi Madrasah of which Mr. N. Law writes :

The Madrasah was a very commodious building embellished with lofty domes and situated in an extensive garden adorned with alleys and avenues, and all that human art combined with nature could contribute to make the place fit for meditation. An adjacent tank mirrored in its shiny and placid breast the high and massive house of study standing on its brink. What a charming sight was it when the Madrasah hummed with hundreds of busy students, walking its clean and smooth floors, diverting themselves on the side of the tank, or listening in attentive masses to the learned lectures of the professors from their respective seats !

. Of the learned men to whom the responsible task of educating the young alumni of the college was entrusted, we hear only of two. There was Maulana Jalaluddin Rumi, the renowned master of many subjects who used to

lecture on Theology, explain to the students the Fiqh (Jurisprudence) and the commentaries on the *Quran* and teach them the time-honoured traditions. The other professor was a great religious teacher and had hailed from Samarkhand.

Both the students and the professors had to reside within the College, and so there were the facilities that a constant communion among the students themselves as well as between the tutors and the taught could afford. The College was not, as can already be anticipated, a place for exclusively secular studies only, but in it was also carefully looked after the spiritual well-being of the students. There was a big Masjid attached thereto in which the five compulsory as well as extra prayers were regularly said, the former being performed in gatherings conducted by the Sufis, who at other times remained engaged in counting beads and praying for the well-being of the Sultan. The Hafizes (those who learn by heart the *Quran*) had to recite the whole *Quran* and pray for the Emperor and all the Mussalmans.

There were separate apartments in the College for the reception and accommodation of the travellers who, attracted by its reputation, paid it visits from distant countries.

The College was also noted for bounty and charity to the poor and the needy, for in its Masjid they received the help they wanted.

There was a suitable provision for the bestowal of stipends and scholarships upon the successful students, and over and above these, every inmate of the Madrasah, be he a student, professor or traveller lodging there,

received a fixed daily allowance for his maintenance. All these expenses were defrayed out of the State endowments as well as, in this particular case, out of the sums of money that were set apart by the State for being given in charity to contribute to the well-being of the Emperor.

Where is now this Madrasah, the glory of its age, with which the Colleges of Delhi, though famous, could never, according to Barni, stand in rivalry? It is now buried, along with its beauty and grandeur, its students and professors, its Masjid and all, in the deep abyss of Time. (*Loc. cit.*, pp. 60-63.)

Another was the beautiful Qudam Sharîf, of which we are given a most attractive picture. It was raised to the memory of his son. Among the greatest merits of this Sultân must be noted his avoidance of persecution. He appointed Hindus to important offices, restored to his kingdom a Hindu Râjâ he had conquered, and when a fine library of 1,300 books was found in a Hindu temple, he ordered that some learned Hindus should be sent there for translating a few books (pp. 64, 65).

Sultân Sikandar (1488—1518) was another who attracted many learned men to his Court from Arabia, Persia and Bokhârâ, as well as from India (p. 77), and it is noted that in his reign Hindus began to study Persian (p. 75), and Professor Blockman is quoted who remarked that

this study began in the 16th century and "that before another century had elapsed they had fully come up to the Muhammadans in point of literary acquirements (pp. 75, 76, Note). He also gives the following interesting note from Keene:

> The name Urdû is of Turkish origin and means literally "camp". But the Mughals of India restricted its use to the precincts of the Imperial camp so that Urdû-i-Mu'allâ (high camp) came to be a synonym for new Delhi after Shâh Jahân had made it his permanent capital. The classical languages of Arabia and Persia were exclusively devoted to uses of State and religion; the Hindus cherished their Sanskrit and Hindi for their own purposes of business or worship; while the Emperor and his Mughal courtiers kept their Turkish speech as a means of free intercourse in private life. Out of such elements was the rich and growing language of Hindustan formed, and it was yearly becoming more widely spread—Keene's *Mughal Empire*, Note, p. 76.

Mr. Law notes that many small Muslim kingdoms sprang up all over India, each making its own contribution to the general progress of Islamic learning in the country (pp. 80-113). He mentions ten of these. A ruler of the Bahmani Kingdom, Mahmûd Shâh, was a great patron of letters, and founded a Madrasah in the Deccan in 1378 for the education of orphans, feeding and lodging them, and providing learned

professors for their training. He also started many schools and endowed them amply. The famous poet, Hâfiz, was invited to his Court, and started for it, but was beaten back by a storm. Another ruler, Firuz, not only went to lectures on botany, geometry and logic, but he sent ships annually to different countries to invite learned men to his Court. He also built an observatory. A minister of a later Sultân built at Bîdar a College which became famous. Our writer quotes Meadows Taylor as saying:

The noble College of Mahmûd Gâwân, in the city of Bîdar, was perhaps the grandest completed work of the period. It consisted of a spacious square with arches all round it, of two storeys, divided into convenient rooms. The minarets at each corner of the front were upwards of 100 feet high, and also the front itself, covered with enamel tiles, on which were flowers on blue, yellow and red grounds and sentences of the *Quran* in large kûfic letters, the effect of which was at once chaste and superb. (Note from Meadows Taylor, pp. 67, 68.)

Bîjâpur—perhaps Vidyâpur—had a College in Hindu times, and Mr. Law remarks:

The college building, made of granite, is very extensive and the most venerable in Bîjâpur, consisting of an oblong, set out with rows. It is three-storeyed, and is still wonderfully perfect, though necessarily out of repair.

With the disappearance of Hindu sovereignty Bîjâpur did not cease to be a centre of learning. The Muhammadans took the place of the Hindus and kept up its literary reputation (p. 92).

A part of the royal Adi Shâhî Library is still to be found at Bijâpur in the Asâri Mahal. Mr. Fergusson tells us :

Some of its books are curious and interesting to any one acquainted with Arabic and Persian literature. All the most valuable manuscripts were, it is said, taken away by Aurangzib in cart-loads, and what remain are literally only a remnant, but a precious one to the persons in charge of the building, who show them with a mournful pride and regret (p. 94).

The king of Ahmadnagar was fond of single-stick, it seems, so "all men, both high and low, began to copy the prince, and instead of Colleges, as is usual in Muhammadan cities, schools for single-sword and wrestling were established in all quarters of the city" (p. 95).

The fine Chaliâr Minâr and its Masjid in Haiderabad Government with the minarets containing rooms for professors and students "is one of the most splendid buildings in the city, and a brilliant specimen of Saracenic architecture." It was built by Muhammad Qulî Qutb Shâh, who founded many other colleges

and schools, while there were primary schools in the houses of the masters (pp. 95, 96).

Among these smaller kingdoms Jaunpur stood high and became "a great seat of learning under its famous king Ibrâhîm Sharqî and it is said that during his reign the Court far outshone that of Delhi, and was the resort of the learned men of the East" (p. 100). His daughter-in-law built a Masjid, a College and a Monastery, giving stipends to professors and students. It had hundreds of Madrasahs and Masjids, stipends being given to teachers and students "that they might devote themselves to learning, in complete freedom from material needs and anxieties. Both literature and the arts were followed" (pp. 101-104). It is said that in so many of these kingdoms and in Bengal these Madrasahs have almost vanished, though it was Muhammadans who had the *Bhagavata Purana* and part of the *Mahabharata* translated into Bengali (pp. 109, 110).

Of the Mughals, Babar himself was very learned, but Mr. Law does not give any details of his aid to education. Hûmayûn was fond of study and conversation, but apparently did not follow the great traditions of past Muslim Rulers.

Akbar (1566 to 1605) was remarkable for his love of learning and his 'Ibâdat Khânâ, with

its four halls in Fatehpur Sikrî, where "Sûfîs, doctors, preachers, lawyers, Sûnnîs, Shîas, Brâhmanas, Jains, Buddhists, Charbâkas, Christians, Jews, Zoroastrians and learned men of every belief" argued on "profound points of science, the curiosities of history, the wonders of nature" (pp. 144, 145). Many parts of the *Mahabharata*, the *Ramayana*, the *Atharva Veda*, the *Lilavati* and many other books were translated into Persian. Akbar collected books assiduously, and Faizi's library of 4,600 volumes passed to the Emperor on his death. He introduced an improved system of education, and Hindus and Mussalmans studied in the same schools. Mr. Law says:

> The sciences were taught in the following order: morality, arithmetic, accounts, agriculture, geometry, longimetry, astronomy, geomancy, economics, the art of government, physics, logic, natural philosophy, abstract mathematics, divinity and history (pp. 161, 162).

Great men and nobles also did much for education. Jehangir kept up the traditions of his father, repairing Madrasahs which had fallen into disuse. Agra, which had become a seat of learning during Akbar's reign, continued to attract both professors and craftsmen, and the progress in Arts and Crafts was remarkable—music, painting as well as architecture lent

beauty to life. Shâh Jahân was more devoted to the last splendid Art than to education in general. But he founded an Imperial College to the south of the Jâmî Masjid; it had fallen into ruins before the Sepoy War, and was levelled with the ground soon afterwards (p. 181). It is startling to find Bernier speaking of the "profound ignorance" in Hindustan, and asking "how is it possible there should be academies and colleges?" (p. 1807) and so on. Strange, what profound ignorance a European traveller could show of the deeper side of a country new to him.

The Impact of Europe.

When the East India Company made its way in its early days, it did not trouble itself about education, except so far as it needed clerks and accountants. These it obtained from the village schools, for although these did not make much mark in history except by the prosperity they ensured to the country, their disappearance meant the descent of the night of ignorance over the land. In the huge number of inscriptions collected by the Madras Government we find many lists of village officials and servants. Among these the village schoolmaster—or the temple priest acting as schoolmaster in small villages—appears. Mr. John Matthai writes :

It is obvious that when the British took possession of the country, in the different Provinces they found that, though in most parts of the country except Western and Central India, there existed a widespread system of National Education, so far as they could trace, the position of the schoolmaster had in many cases changed from that of a village servant with a defined position in the community into that of a casual worker—honoured in the village by reason of his sacred calling, but not sufficiently identified with the village to hold his ancient place on the village staff. This statement is true in the main, but nevertheless there were various traces left which pointed to the original connection of the schoolmaster with the village economy.*

In the evidence given before the two Houses of Parliament in March and April 1813, Sir Thomas Munro mentioned, as one of the reasons why England might gain in her contact with India, was "schools established in every village for teaching, reading, writing and arithmetic."†

In a despatch from the Court of Directors of the East India Company, dated June 3, 1814, the following passage occurs, referring to village communities and their schools :

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* *Village Administration in British India*, quoted in *Lectures on Political Science*, by Annie Besant, (pp. 95, 96), 1919.

† *Ibid.*, p. 96. See Note D, appended to James Mill's *History of British India*, Vol, I, p. 371.

This venerable and benevolent institution of the Hindus is represented to have withstood the shock of revolutions, and to its operation is ascribed the general intelligence of the natives as scribes and accountants. We are so strongly persuaded of its great utility that we are desirous you should take early measures to inform yourselves of its present state and that you will report to us the result of your enquiries, affording in the meantime the protection of Government to the village teachers in all their just rights and immunities, and marking, by some favourable distinction, any individual amongst them who may be recommended by superior merit or acquirements; for, humble as their situation may appear, if judged by a comparison with any corresponding character in this country, we understand those village teachers are held in great veneration throughout India.*

The destruction of the village system in 1816 in Madras, left the schools uncared for; the imposition of rent on cultivators who had had their share in the land of the village community, made them poorer, and the schoolmaster, no longer provided for, disappeared. These "pial schools" are still occasionally to be met with. In Adam's Reports in which appear the results of an enquiry in the Bengal Presidency, 1835-1838, Mr. Adams took typical Districts, not the whole Presidency, and found, in addition to the

* *Ibid.*, pp. 96, 97. See *loc. cit.*, Chap. II, Para 5, p. 43.

Toles and Madrasahs, Pâthashâlas and Maktabs. The first were found in "all the larger villages as in the towns. . . The age of the scholars was from about five or six to sixteen. The curriculum included reading, writing, the composition of letters, and elementary arithmetic and accounts, either commercial, or agricultural or both."* Mr. Ward gives a similar account. With regard to Muhammadan education, it went down rapidly. *The Quinquennial Review* for 1907-1912 reports that in 1912 there were 1,446 Arâbic and Persian schools (Madrasahs) and 8,288 Quran schools (Maktabs) as against 2,051 and 10,504 in 1907.

It was natural that a foreign merchants trading company, intent on gains, should not trouble itself about the education of the people of the country, except for their own purposes. The enquiry of 1814 was due to the fact that the renewal of their Charter by Parliament was conditioned by their setting aside a lakh for educational purposes. They wanted, however, English-speaking subordinate officials merely, and did nothing for the languages of the country. Deprived of all the support given by Hindu and

* *Ancient Indian Education*, by Rev. F. E. Keay, pp. 145, 146.

Muslim Courts, higher education in Sanskrit, Arabic, Persian and Hindi languished, and the loss of common land starved popular education to death. Nothing changes the state of a nation so rapidly as the education or non-education of two or three generations. When Sir Charles Wood in 1854 introduced, and Government patronized, English-speaking schools, the masses of the people rapidly sank into ignorance. Education, in every country, must be given to the masses in their own tongue. The want of it has made India admittedly the most ignorant country in the civilized World. There is a stratum of highly educated people, and huge masses of uneducated.

Matters are, however, improving, and the Indian languages are at last beginning to come into their own.

The fundamental reform needed in the schools is the teaching of all subjects in the mother-tongue, and English as a second language in the Middle and High Schools, *modern* English, largely taught by conversation, by much reading aloud of interesting books, stories and short recitations. Indian history, written by Indians, must be studied to arouse and cultivate civic emotion and broad-minded patriotism. The

study of literature belongs properly to the Universities, is the material of culture rather than of education.

To restore the village community with the village school, the village industries, a right system of landholding and, where necessary, irrigation—these are tasks for Rulers and the Statesmen. But the work of a University is to prepare the young men and women of the nation to take up these heavy duties, these mighty tasks, demanding noble character, trained brain, and loving, well-disciplined heart, and stalwart active body.

Precious to you, young men and women who are students here, should be these brief years of preparation, for if they are wasted, life will bring you no other opportunity such as you now enjoy.

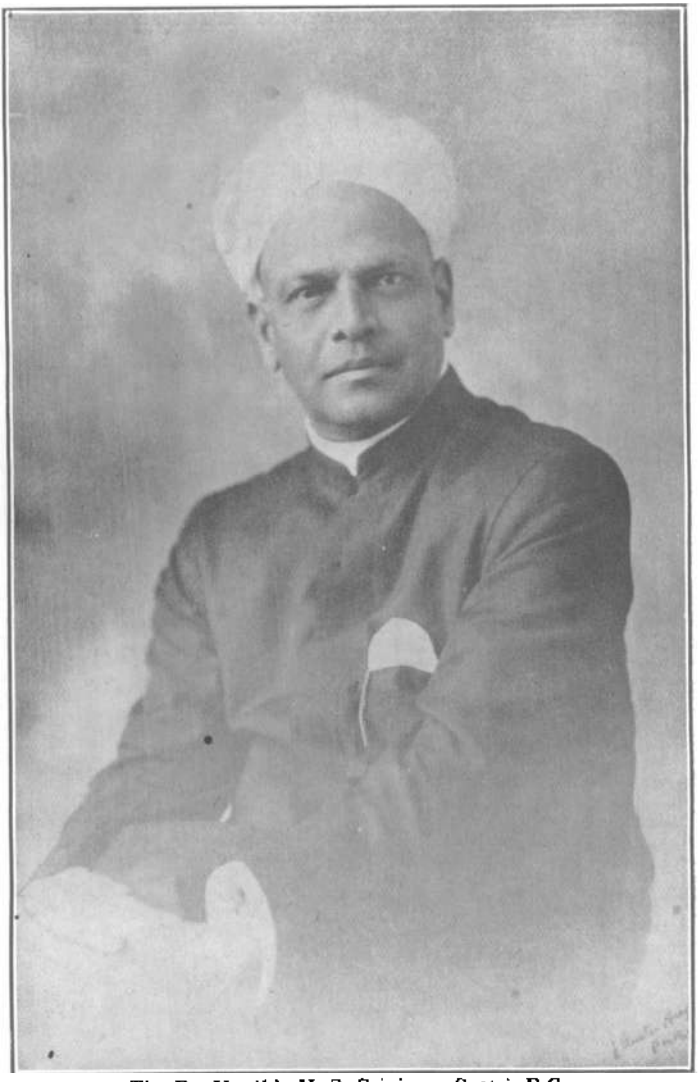
Before some of you to-day the door into a wider life is opened ; you step over the threshold of youth into manhood and womanhood, with its duties, its burdens, its joys, its freedom to acheive and to serve. Never forget that Life can only be nobly inspired and rightly lived if you take it bravely, gallantly, as a splendid Adventure, in which you are setting out into an unknown country to face many a danger, to meet many a joy, to find many a comrade, to win and to lose many

a battle. Consecrate yourselves to-day, my young brothers and sisters, to the Service of God and Man, and you will find that both are one; that in you will show forth in His strength, in His wisdom, in His love, the Inner Ruler Immortal, and that in serving man you shall see in each you help the Hidden God, till all the world shall become radiant with the Divine Beauty, and weakness shall turn to strength, sorrow shall turn to joy, for Brahman is Bliss, and *Tat Twam Asi.*

Address delivered at the Convocation of the University of Mysore on 14th September, 1925, by the Rt. Hon'ble V. S. Srinivasa Sastri, P.C.

YOUR HIGHNESS, LADIES AND GENTLEMEN,

By the desire of the head of the University, who, by reason of his exalted station and personal qualities, is entitled to respect and obedience, I am now to do my part in this day's programme. Under the rules, an address suitable to the occasion has to be delivered by a member of the Senate or other person nominated by the Chancellor. Not being a member of the Senate, I come under the heading "other person". Not in itself an exacting or terrifying description, to be sure. Your predecessors listened to men who had scaled the heights of office or borne the burdens of university administration. In weighty and learned discourses, they dealt with high problems of education and educational organization, and conjured up a vision of an ideal place of learning where courses of study, professors and scholars, physical conditions and mechanical appliances, were all as they should be and left nothing to be desired. I confess I have no such ambition. Nor do I feel competent to discuss the merits of



The Rt. Hon'ble V. S. Srinivasa Sastri, P.C.

the scheme of re-organization which is now engaging the attention of local authorities. It were easy for me to endorse with a light heart the request for an assignment of ten lakhs a year for the upkeep of the university and of an undefined amount as capital outlay. Should the endorsement drag me into a consideration of Mysore finances and Mysore politics, I should only be shifted to my native element, for during a great many years now, politics has been as meat and drink to me. And if anybody were to remind me that I had not the necessary local knowledge, I should reply exultingly that I had outlived the simple time when ignorance was considered a disqualification for the office of agitator. Unencumbered by accurate information of any kind and not having to answer for the consequences, what could be easier than for me to let fly a few random shafts which would hit ruler and subjects in tender places and leave behind a trial of mischief and embroilment? You may be thankful that the imp in me is not so highly developed. Mine be the homely task of an elder brother who seeks in confidence and love to give the benefit of his experience to the junior members of his family. Thirty-seven years ago, I left my *alma mater*, as most of you would presently leave

yours, not without distinction. And although I cannot boast of having made fame or amassed a fortune or acquired a wide command over men, my life has enabled me to see some men and some things out of the ordinary; and it may be that, if you are attentive as well as silent for an hour or thereabouts, I shall impart some words of needed counsel and warning.

The most natural starting-point is the position in which we find ourselves at this present moment, I as the chosen guest, and—may I add without vanity?—the spokesman of the university, and you as the finished products upon whom the ceremonial just concluded has set its authentic seal. By the regulated life that you have lived here, by the careful discipline to which your minds and bodies alike have been subjected, you are fitted, as we trust, for the trials and duties of the world, for the proper use and enjoyment of the greater measure of freedom that awaits you. For always pupilage is the necessary prelude to the liberty of the adult, and no one can ever command who has not previously learned to obey. Honour and cherish the university then as you would the mother that nursed and brought you up. Some of you will become its officers; some in time may wield great influence in

shaping its future growth; others may be in a position to endow it or help in other ways; but all, high or low, distant or near, must watch its interests with anxiety and aid in the formation of that wide-spread public sympathy and public support on which alone a popular and successful university can thrive. You will be perplexed and distracted by conflicting views as to the proper aim of a university. Ability to earn a living, preparation for life and for citizenship, acquisition of knowledge and the power to add to it, formation of a good and virtuous character—all these, separately or in combination, have struck theorists as the fundamental purposes of education. If you do not care to be profound or philosophical, but will be content with a common and intelligible idea, you may regard a university as a place where personality plays on personality by the establishment of an intimate human relationship between teacher and taught. This way of looking at it has the great merit of drawing attention to the supreme importance of the teacher as a factor in university life. Well-planned curricula, fully equipped laboratories, large libraries, noble halls, and imposing recreation grounds—these are good and useful things in their way. Let nobody despise them. But

an able and zealous professoriate is the very life and soul of a place of learning. And in selecting its members the utmost care and circumspection are necessary. Unfortunately it is just in this part of the organization of a university that irrelevant and unworthy consideration of race, religion or sect come into play and impair efficiency and reputation at once. A word of caution may be appropriate here. Learning knows no narrow frontiers, and a really good professor is not always to be found within a circumscribed area. Jealousy of the outsider in this sphere is even more disastrous than in other spheres, and however it may gratify the popular whim for the moment, it will surely involve the sacrifice of large and permanent interests.

One platitude leads to another. Having got your staff together, the next thing is to give them what is called "academic freedom". Of this the professor is frantically jealous, and the layman who takes an intelligent interest in university affairs is often startled at the thunder and lightning which a casual and innocent remark may produce in the blue sky of the Senate. Usually academic freedom is in danger from the grasping hand of bureaucracy. A great writer of educational subjects has recently said, "Standardization,

government-made uniformity and bureaucratic regulation are not the allies of education but its mortal enemies." Tyrannical, deadening, soul-killing are the mild epithets in the vocabulary of the irate pedagogue when he wishes to characterize the control of the authority which bears a great part, sometimes, as here, much the greater part, of the burden of university finance. The maxim " he who pays the piper will call the tune " is summarily ruled out here. Government is to be like the postal peon, who delivers a money order, but cannot stay to see where the money is kept or how it is disposed of. The encroachment of the State, however, is encroachment by cultivated people and, therefore, mitigable by reasoning and negotiation. But in these days of expanding democracy the sanctity of the temple of learning is subject to a greater danger from sudden inroads of popular clamour and prejudice, miscalled public opinion. That variety of politician whom we call by the disrespectful name of demagogue at times attains a tremendous influence which sweeps aside professor and professorial regulation. People uprisen have no use for the expert. Standards may be lowered, the medium of instruction changed, and discipline undermined, the teacher hiding

his diminished head the while. To you, who have felt and can never cease to appreciate the tender and delicate relation of *guru* and *sishya*, and who know how an atmosphere of prejudice and passion is inimical to the scientific pursuit of knowledge, to you, I say, graduates of the University, scattered far and near, and able by your numbers and influence to control these turbulent squalls before they attain their fury, the authorities of the university have the right to look with confidence for energetic and timely interposition. In such moments of peril, do not, I pray you, stand looking on or mumbling excuses for the insurgents, but come round your *alma mater* and guard her like valiant and faithful sons.

After the University, but not below it in rank or precedence, I would mention your State as entitled to your homage and loyal service. In extent and size of population, in natural resources, in salubrity of climate, Mysore does not come behind many Indian States. In variety and charm of natural scenery and in possession of places of historical and architectural interest, believe me, who can speak with some knowledge, she has few superiors. The history of the areas comprised in her territory, so far as it has been studied, discloses periods of prosperity and

stable government, and is brightened by deeds of valour and episodes of romance, of which you may well be proud. The culture of her people, their aptitude for crafts and industries, their literature and their love of music and the fine arts, are not easily surpassed. As for her highly evolved administration and the extent to which personal rule has been surperseded by the reign of impersonal and impartial law, for the high level of efficiency and purity of her services, and for the devotion displayed by the sovereign towards the welfare of his subjects and his keen desire to respect their wishes and such constitutional rights as they possess, why, by almost universal consent, Mysore is second to none among Indian States. Does not such a home deserve all the passionate love and filial devotion of which you are capable? It is a mean—one might almost say, monstrous—spirit which scans with cold precision the qualities of one's mother, and measures gratitude and service accordingly. On the most material calculation of the opportunities that Mysore affords for the full development of your faculties and the rewards which may be expected for high-class industry and enterprise in any sphere, the keenest wits and stoutest hearts among you need not feel themselves

thrown away on this country and her advancement. Go out and spread into every nook and corner, leave the big towns where all the avenues to success are over-thronged, and try what patient toil and scientific organization can do to make field and rock, forest and hill, yield their utmost for man's benefit. You have fine irrigation works, of which full advantage has yet to be taken. Let not jungle and malaria beat you back for ever. Jungle and malaria have yielded elsewhere to axe and fire, drainage schemes and prophylactics. Lack of large capital in individual hands can at least in part be met by many-sided co-operation under the aegis of an indigenous and enlightened government, which will be only too glad to provide expert guidance and financial guarantees for any well-considered schemes by which the methods and appliances of science will be employed in exploiting natural resources. It has been truly said that the engineer, taking him in all his grades and kinds, is of all human agencies the most valuable, nay, indispensable, for the economic growth and material prosperity of a country. A state which produced Sir Mokshagundam Visvesvaraya need not suffer at any time from a paucity of engineering talent.

Do not infer from my recommending this course that I am trying to divert your attention from politics. Whoever might do so, I could not unless I wished to stultify myself completely. By all means strive to improve your political status. Only let me entreat you to remember two things. You have cause to be thankful that you are subjects of the most progressive and well-governed State in India. Engrossment in local politics is apt to engender a narrow provincialism and even for full efficacy in its own sphere, may require to be corrected by study of Indian affairs.

Many of you will seek careers in the employ of Government. No inducement is necessary in that direction. On the contrary, you may have encountered in your reading several appeals, more or less cogent, against the general notion that in Government service one finds the most honourable scope for one's talents. I have never been able to join in this fashionable crusade. As the point is of some consequence, let me keep you a few moments on it. In British India to a great extent and in the States to a much greater extent, the official class are a great power. Their prestige and authority were in former times unquestioned and even now remain strong, far

beyond what they would be if the men were private individuals. Sometimes when an officer was scrupulous and high-principled, this vast influence was used for benign purposes, and we have all heard of many foundations of charity and public utility which owed their origin either to their munificence or to the munificence induced by them. More often, however, I grieve to say, it was grossly abused, and the tyranny thus practised over a long period of our history has led to the popular saying that the official tyrant is one of the six scourges that our race has to suffer for its sins. Custom might occasionally be relaxed, laws and regulations could be evaded, drought and flood were occasional, dacoity was rare, but the pressure of the king's man, armed with tyrannous power and spreading everywhere, knew no sleep; it was heavy and harsh; it destroyed the self-reliance and initiative of the common people; public spirit, resistance to the oppressor were unknown. The submissive and servile nature of the people was so marked that in the famous resolution of Lord Ripon on Local Self-Government it was euphemistically described as our remarkable power of acquiescence. If this incubus weighing on the hearts of our poor folk is ever to be lifted, it must be through

generations of conscientious officers drawn from those whose hearts have been trained to the appreciation of humane ideals. It is a commonplace of our administrative history that a great uplift in the standards both of efficiency and purity has been brought about by the appointment of university men to places of control and authority. More and more as representative institutions are introduced, it is necessary to provide for them a stable and strong foundation in national character. Love of freedom and readiness to repel encroachment on it from any quarter, a keen sense of the rights of the private citizen as well as his duties, these elements have to be built into the very fibre of our people; and whom could we safely trust with this noble and benign mission if not the wisest, the noblest-hearted and the most chivalrously disposed among you? The good work has happily gone on for some years, but it must continue for a long, long time yet, if the blighting effects of centuries of misrule are to be obliterated. Go then and take office; but in order to put it to this high use, look upon the ryots and the labourers as children committed to your care, whom you must bring up in the ways to use big words in a small context, of self-reverence,

self-knowledge, self-control. Treat them with consideration and courtesy; use polite forms of address; and give a sympathetic ear to their representations; so that they may learn that you are there to understand, to help, to serve. So would you truly and faithfully represent His Highness to his subjects. So would you, like a thousand well-trained hands, carry out in all corners of his realm his inmost wishes.

An important task rests on you as educated men and women to keep up the intellectual curiosity awakened in you by your varied studies and add fresh knowledge to the store here accumulated. Nothing distinguishes true culture from false so surely as this inquisitive spirit, the desire to keep abreast with the best thought of the world, to know things as far as possible in their essence and thoroughly. Unfortunately many of us have heavy cares and duties, our posts are often in out-of-the-way places, where books are rare and congenial friends still rarer. We get little time for the exercise of our higher minds, so completely are we engulfed in the petty details and routine of daily duty. For persons in such desperate case may we not prescribe a well-thumbed classic or two as constant companions? Each has his favourites and perhaps

changes them every few years. But to them he may return again and again and slake his thirst as at an ever-living spiritual fountain. The greater part of us, however, will live in more favoured spots where our minds need not starve except through our own neglect. Alas! such neglect and starvation are too common. It would be ungracious to enlarge on this topic, but let any one mention half a dozen large towns where of a Sunday afternoon one might go to the local club or reading room with the hope of listening to an elevated conversation on the topics of the day, or to a public debate in which a subject was discussed so as to stimulate the mind, suggest fresh points or create a zest for further enquiry. Somehow after we leave college, a sort of mental exhaustion seems to set in from which only a few recover. Do you remember that famous story of Dr. Johnson? Once while he was recovering from an illness, someone proposed to send for Burke. "Don't!", cried the Doctor, "if that fellow were to appear now, it would kill me at once. He calls forth all my mental powers." Without having the excuse of physical debility, we seem to be in mortal dread of having to listen to a lively debate on a rousing topic, let alone taking part in them. In

a certain measure this undesirable phenomenon occurs elsewhere as well. I was surprised, while reading a book by Dr. Nicholas Murray Butler, President of the Columbia University, to come upon the following passage :—

"Speaking not long ago in the City of New York, Israel Zangwili paid us the compliment of saying that we Americans are the best half-educated people in the world. My impression is that he put the fraction rather high. If we measure our education by the expenditure of moneys, public and private, upon schools of every type and sort, then plainly these amounts are enormous. If we measure our education by the number of pupils under formal instruction for some part of each year, the numbers are certainly agreeably large. If we measure our education by the splendour of the school buildings which of late have been erected in a thousand communities scattered throughout the land and by the excellence of their equipment, then assuredly the impression is most flattering. If, on the other hand, we seek for those surer evidences of education which are marked by correctness and precision in the use of the mother-tongue, by refined and gentle manners which are the expression of fixed habits of thought and action, by the power and habit of reflection and the use of scientific method in the approach to new problems of public and personal import, or by the power of intellectual and moral growth, then it may well be doubted whether the results are quite so flattering."

Some may feel a little comforted after

reading this passage, but I fear it applies to the facts of India with much greater force than to those of America. It is the privilege of Convocation orators to formulate counsels of perfection to their bored audiences, and if I appear to tread in their path at this point, I can only plead in defence that I do not consider my suggestion a counsel of perfection. Outside the requirements of our profession, newspapers form the pabulum of our reading. But often-times an important topic comes up in which the interest is maintained for several weeks, and each man misses something or other necessary for full comprehension. Hardly a month passes without two or three such topics emerging. Suppose a fair-sized town in which twenty people joined together and procured access to a few magazines and newspapers. Let us imagine them to meet one specified day every month at which it was the duty of one member or two, as the case may be, to give a connected account of two selected matters from his reading. You could on such an occasion hear all about fundamentalism, the trial at Dayton and some of the arguments used on both sides, at least the Biblical passages relied on by Bryan. The discussion that followed might ramify in several interesting issues. The theory

of evolution would naturally come in, and a member of wider reading than ordinary would perhaps outline the modifications that had been made since Darwin's day. Another would draw a picture of the personality of Bryan, so simple and yet of such vivid interest. You might hear of Bryan's visit to India and the violent antipathy evoked in Anglo-Indian society by the book in which he recorded his experiences. A member with a turn for practical speculation—pardon the paradoxical expression—might invite his audience to consider what would happen in some of our provinces in the extremely probable contingency of a majority passing obscurantist laws of the kind under which Mr. Scopes was convicted and enforcing them. The coal crisis in England, the security pact, the Indian disability in Thanganyika with special reference to the British mandate, the questions involved in the reference to the Skeen Committee—these are only some of the numerous illustrations that might be brought forward for proving the great intellectual benefit that such a league or association would confer on the locality. By spending an hour at one of these monthly meetings you could learn a lot of interesting and useful matter which it would take much time and energy to

find for yourself. This might seem child's diet to grave and reverend professors hankering after philosophical speculations and recent scientific advances. But the busy professional man, whom I am thinking of, would do well, at least in the beginning, to avoid strong meat. Whenever you hold such a meeting, go not, I warn you, too near the chess board or the bridge table lest by heedless chatter you distract minds intent on vital and intricate problems. Nor should you allow any but a poor man's tea to refresh you; rich hosts have a captivating way of giving precedence to the body over the mind, and the discussion would shift its object almost entirely. One more caution, if you please, before I pass on. If the principal speaker appointed for the day happen to be a lawyer in good practice, do not forget to provide yourself with a handy substitute; for some witless client may remove him at the last moment to a more profitable debate, and not even allow him to give you due notice.

Even more than this mental alertness and elasticity, another attribute is distinctive of university culture—the balanced mind. Sad to think, it is also the rarer. I once had to speak to an association of graduates in Australia, and posed the query, "Do modern universities aim

at a balanced mind?" From the tenor of ensuing conversation I could see that other minds had been agitated over the problem. Once upon a time the true mark of a completed course of education was the habit of proving all things before coming to a judgment, the disposition to look at a matter from all points of a view, the habit even under exciting circumstances of bringing full and unclouded reason to bear on the subject at issue. Modern life with its hurry and whirl seems to have banished leisure, poise, serenity of outlook. The countless little details claiming our attention from moment to moment scarcely allow of the formation of a whole and harmonious picture with every feature in true perspective. The newspaper press, shouting and screaming the whole day long, keeps pouring into our minds a chaos of unrelated thoughts. Of any particular object or idea we seem only to catch a fleeting phase, an aspect of an aspect. And yet we have to make up our minds, to choose our sides, and to cast our votes. We could not hold our judgments in suspense if we would, and, for a wonder, most of us would not if we could. We do not seem even to care for justice, harmony, co-ordination. In the legislature we hear only partisan views of things, and,

if we wish to count for something, we must give partisan votes. How the laws in such a dispensation can be just and suitable is no concern of ours. In the courts, clients, witnesses, advocates are all naturally for their own side of the case and make no attempt to disguise the fact. The result, as we all know, is that the judge is often hindered from discovering the truth, not helped to do so. So in the public discussion of questions between conservatives and reformers capital and labour, and so forth, the active spirits throw themselves heart and soul into one side or other of the dispute. Newspapers, instead of endeavouring to create a sober and healthy public opinion, are avowedly partisan and, while presenting their side in attractive colours, consider it no part of their duty to be equally generous to the other side and in many cases misrepresent, suppress and run it down. So far has this evil grown that young and inexperienced readers, taught only by one set of papers, ascribe innate cursedness and moral perversity to the other school of thought and its advocates. Among us the situation is further complicated by the upsurging of the communal spirit, the various sects and factions demanding each its share and more than its share, and leaving the

State altogether in the lurch. The modern machinery for striking the balance, commissions, and committees and assessors, are but imperfect and untrustworthy approximations. The personnel of these bodies on which hang vital issues of equity and justice is itself made a subject of acrimonious contention. Where all are tainted, few can be expected to hold the scales even. Do our universities—let me put the question though I do not expect an answer—with their ever-increasing specialization of studies produce of set purpose the type of mind necessary for discovering the golden mean, the safe middle course between opposing tendencies? Is there no use, even in these tranquil places dedicated to truth and wisdom, for the man who hesitates, who weighs arguments with care, who resists the sway of passion? A recent Governor of one of our provinces, who had been a radical in English politics, turned out to be unprogressive here. He once explained the phenomenon to me. He sought advice from every quarter on a disputed issue, he read all the papers dealing with it. The rights and wrongs seemed to him so equally balanced that the case for change was never wholly made out. So, he said he left the old arrangement continue, it had answered so far.

He was a typical conservative, a perfect Hamlet of politics. But surely deliberation is not indecision. It will lead to action quite as often as to inaction. And the action to which it leads will be safe and suited to all the attendant circumstances. I freely admit that the conscientious politician is not popular. His counsel of patience and moderation is irritating to eager and enthusiastic natures. Yudhishthira was called many ugly names by Bhima and Droupadi. But he did not allow himself to be hustled. "Unagitated like the sea, immoveable like the mountain" he waited till the time arrived and then struck and struck home. The cross-bencher is not beloved of his tribe, but the cross-bench mind is an ever-present and an ever-growing need. Believe me, it is no disease, no infirmity. On the other hand, it is the crown and summit of liberal education. It would be an evil day when it became extinct, and the high function of universities is to foster it with tender and unremitting care.

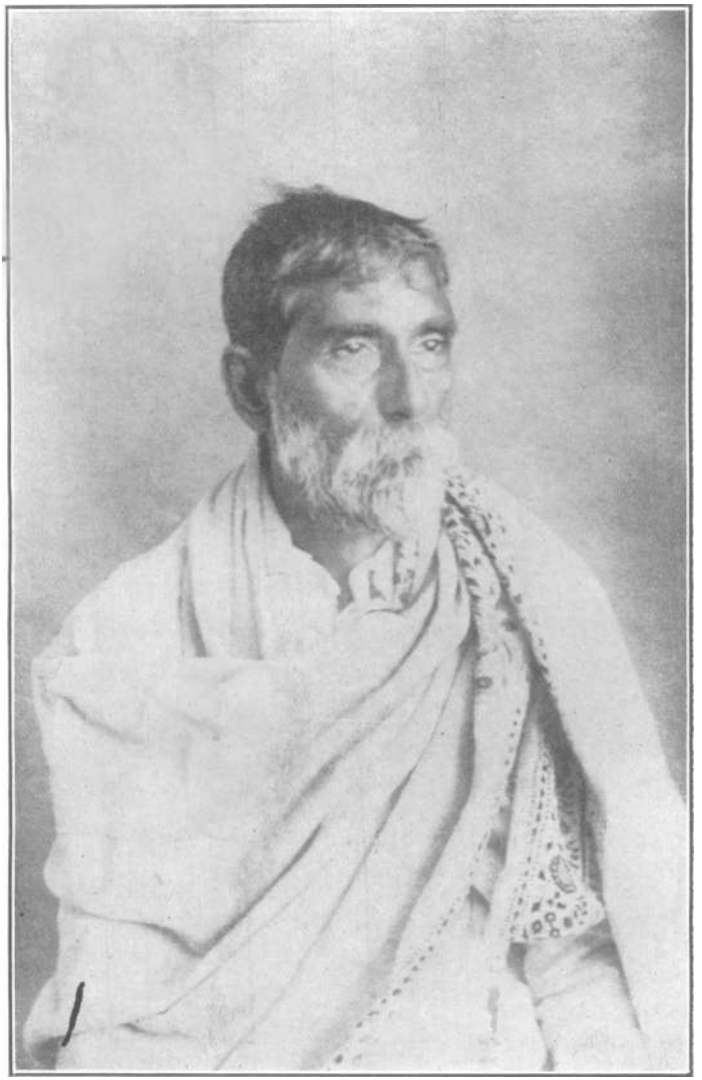
Address delivered at the Convocation of the University of Mysore on 27th November 1926, by Sir P. C. Ray.

YOUR HIGHNESS, LADIES AND GENTLEMEN,

Ten years ago when I had the good fortune of being present on the historic occasion of the inaugural ceremony of your University, I rejoiced to find that a very momentous step had been taken by one of the most distinguished and far-seeing rulers of India. Since then, I have always been closely watching the progress of your University, little thinking that I should, one day, be called upon to deliver its Convocation Address. Allow me, therefore, to offer my sincere thanks for the honour you have done me and to assure you how greatly I value it.

At the very outset I must confess that I feel not a little nervous to address you in the presence of a Vice-Chancellor whose encyclopædic knowledge and attainments and whose extraordinary power of synthesis are, at once, the wonder and despair of literary men in India. It is, therefore, on your patience and kindness that I must rely to be able to discharge my task successfully.

Mysore is one of the most progressive and



Sir P. C. Ray, Kt., C.I.E., D.Sc., Ph.D.

enlightened Feudatory States in India, and the experiment which you have started here is being watched with intense interest all over the country by persons connected with Universities not only in sister States but also in British India proper. I shall avail myself of this opportunity to give expression to my thoughts on certain aspects of the educational problem which these long years of the closest association with young men and educational institutions, both at home and abroad, have forced upon me. The clearness with which the vision of an ideal University stands before me to-day is, undoubtedly, the result of the great process of elimination working, consciously or unconsciously, for more than thirty years of my educational experience; and let me not be misunderstood if I begin by saying that the problem of education, here or elsewhere, has, in the main, not been handled with that intelligence and sagacity which it deserves. To be frank, we in India have, since the British occupation of our country, always regarded *our* educational problems from a point of view which is *purely* British. Though it may not be true of the present moment, there is, I am sure, no one here who can deny the fact that until very recently we, Indians, conveniently relegated the task of evolving *our* educational

institutions to our rulers who, as it was natural for them, transplanted *their home* institutions to *our* soil.

The outstanding difference between the ancient or mediæval University and the modern is the merely cultural aspect of the former and the cultural and vocational traits of the latter. In ancient and mediæval times, the differences between University and school education were instinctively regulated both as regards extent and object. This was possible as many of the learned professions had not then been clearly outlined nor had so many come into existence. The system offered a more or less satisfactory solution of the ordinary educational requirements of the people of the time, the higher learning being mainly sought by those who had "scholarly instincts". With the coming into existence of many learned professions later on, social and economic necessity led many more to seek training in these higher institutions (or Universities) but when the inrush became disproportionate to the demand, and some of the universities, through want of proper perception, allowed their halls to be used as 'marts' and not 'mines', the unsuitable character of the modern system became apparent.

We thus notice the more thoughtful Universities changing their character from an 'examining' body to a 'teaching' one. I confess that a certain amount of 'examining' trait must exist in all Universities as the business of life requires that we must judge. But to lay more stress on this than on the creative side of human intellectual efforts would reduce them to the condition of commercial coaching establishments. There must be separate institutions for such particular *feats* as training for the competitive Civil Services, but here in the University our motto should be 'Advancement of Learning'.

I shall now try to prove that unless such distinctions are introduced into our educational system, the functions of our Universities would be too unwieldy and that a clear demarcation between the school and University efforts is, under a healthy condition, inevitable. As I have said on many occasions we cannot in life escape an assortment, be it biological or intellectual. Whilst biological selection often ruthlessly puts aside the infirm and the weak, in the intellectual world, goaded by social instincts and the idea of social or State responsibility, an effort is made to equip a man on the score of his intellect. To sharpen the intellect or illuminate

the mind up to a certain extent is not difficult with most men, but intellect that can create is a rarity, and the development of such an intellect if undertaken in an organization must needs be different from the less gifted ones. Whilst general education is a necessity—so beautifully represented in the Soviet Educational Poster by a blinded man about to fall down a precipice, —and to-day a birth-right with most, the higher cultural centres are useless for their immediate purpose. The demarcation is thus clearly based upon intellectual capacity.

I have already indicated that most Universities exist for two purposes: for the training of men and women for certain professions, and secondly, for the sake of pure learning. It is obvious how the functions of the two, though different both physically and morally, are quite interdependent. True, the practice of existing knowledge may do for a number of years, sometimes for a generation perhaps, but soon its effects weaken and new knowledge is realized to be a necessity in the life of mankind for its very progress. Thus the merely practical education in the Universities would have to be filliped and given a direction by original research. Between the unalloyed investigator and the practical

utilitarian there are necessarily many gradations which fill up University activities, and I would rather that each understood his vocation so that pure learning could flourish and for ever continue to replenish the bowl of human understanding. If this is our ideal, our methods of achieving the same must be shaped accordingly.

If we begin by critically examining our methods in India (not only in your University) the first outrage that we find we committed was in making a foreign language our vehicle of instruction. It is surprising that this principal reason for our intellectual sterility was not discovered till very recently, and it is still more surprising to find that some of the well-known educationists of the time continue to regard this relegation of the English language to an inferior position as fraught with disastrous consequences! To avoid misconception, I must here, once for all, make it clear that the study of English or other important foreign languages is by no means discouraged ; they open up newer vistas of thoughts and ideals ; there is no need of entertaining the fear that the language in which Shakespeare and Milton wrote will be left uncultivated. Only it must not be looked upon as the medium of instruction. A man of education

must, in the first place, be one well up in all-round information, and he can gather it best and in the minimum of time if he does so in a language he learned to lisp in, while sucking his mother's breast—the language of his nursery. Arithmetic, History, Economics, Politics, Logic and Geography, in short the book of knowledge, can readily be mastered in one's own vernacular. That should be the first stone in our educational edifice if we want to build well and high!

Everyone will admit that with an improved and broadened form of secondary education, the functions of the Universities will be stripped of many of their unnecessary appendages, making thus for real progress. The mechanical portion of training, which ought really to be finished in the school stage, but which unfortunately is carried on to the University forms, will then greatly disappear and make these Universities real centres of learning and culture. I fear a good deal of explanation is necessary at this point, mainly because the present University system is as yet so full of routine details that its function is not very far removed from that of a Secondary School. Even in the post-graduate stage there are some who would insist on definite exercises! I do not for a moment suggest that

in the Universities under the cloak of freedom of choice of study any indolence should flourish. The habit of industry in addition to intellectual capacity should form the primary condition of continuance in the University. All that is implied is that the numerous compulsory class lectures and exercises that form to-day the basis of education in the Universities should be abolished if the intellectual capacity of University students is to develop. No doubt the lecture system gives an appearance of work, but if the student is himself willing to utilize his time, he would in most cases find that he gets through more work by absenting himself from these compulsory lectures.* The greatest disadvantage of

*Adopting as his text the dictum of Carlyle that the modern University is a University of books, Mr. H. G. Wells says:

"Now the frank recognition of the book and not the lecture as the substantial basis of instruction opens up a large and interesting range of possibilities. It releases the process of learning from its old servitude to place and to time. It is no longer necessary for the student to go to a particular room, at a particular hour to hear the golden words drop from the lips of a particular teacher. The young man who reads at 11 o'clock in the morning in luxurious rooms in Trinity College, Cambridge, will have no very marked advantage over another

the compulsory lecture system arises from the fact that those that attend can only under exceptional cases ask questions to clear their difficulty, and as is only natural, the teacher only explains his own view-point. To remedy these evils, the tutorial system is being introduced in some Universities; but although this latter partially supplements the incompleteness of the former method, its general effect, so far as I am aware, is more of the nature of coaching without intellectual effort. Just consider the opposite system where the student is only given the names of some books and some questions on the problems dealt therein; he reads them, digests them and develops his own answers to the questions by a process of thinking which is his own, and then in the College Seminary discusses them from his own point of view with his colleagues and professors, preferably in limited groups. I am sure under these circumstances his powers of analysis as well as synthesis will be better developed, and his efforts, though irksome in the beginning, will soon enable him to carve out his own intellectual empire. All these, however, presuppose a sound secondary education.

young man, employed during the day, who reads at 11 o'clock at night in a bed-sitting room in Glasgow.

The question may be asked, if the lecture system be abolished, what should be the function of professors? The answer is obvious—the function of the professor should be mainly original research. Where he feels he has something new to impart, he lectures, he discourses and thus keeps the spirit of enquiry for ever alive and growing in this intellectual democracy. In the words of Bertrand Russell, skill in pedagogy in University teaching is no longer important.

I may be now allowed to review in short the workings of my own University, I mean that of Calcutta, from the point of view of the ideals laid down above. While regretting that our secondary system is most deplorably deficient for which the medium of education is not inconsiderably responsible, the post-graduate system developed by that illustrious educationist, the late Sir Ashutosh Mukherjee, approaches my conception of University ideal. Its highest ideals are conterminous with absolute intellectual freedom, the full realization of which is unhappily being hampered by financial inadequacy. I shall not be guilty of high treason against my Alma Mater if I choose to infer that to meet this inadequacy, we have been forced, to a certain extent at any rate, to keep both the secondary and degree

courses of instruction tied to our apron strings. The effect of such a system is that healthy elimination for which I stand is secured only partially, and necessarily the beneficent effect of the post-graduate system is reduced. In those sections of the post-graduate department, for instance, the science sections where limited accommodation practically ensures rigorous elimination where the munificence of far-seeing donors have placed teaching and research on a comparatively sounder basis, the record of work and the output of original contribution are by no means unworthy. The workers in the College of Science, students and teachers alike, come into that intimate contact with one another which is truly characteristic of an intellectual democracy. On the other hand, in the Arts section where by the very nature of circumstances already alluded to, the elimination is far less, though the teachers themselves are a distinguished brotherhood, each contributing to the stock of human knowledge worthy of their position, the mass of students lose that most important of all opportunities,—the contact with the inner workings of the teacher. That I consider as the greatest loss in a University system! While hoping that improvement of the lower forms of education will soon

remove these difficulties in our University system, I cannot help noticing with regret that in the executive organizations of our academic system, the student element is entirely absent. Nothing teaches a man more than responsibility, and the feeling that he is of the system. In Soviet Russia, this method of introducing the student element in the executive bodies of schools and colleges has been productive of such good results that we outsiders, who really care to make our educational institutions part and parcel of our organic growth, should lose no time in adopting this novel system.

I have so far then pointed out four of the main defects of our University educational system: *the medium of study*, *the absence of elimination*, *the system of compulsory lectures*, and *the non-participation of students in the organization*. Of the many other defects probably the one that deserves next consideration is the notion of regarding Universities as preserves for certain hall-marked people. This exclusiveness had any meaning so long as we believed that our system of preparatory education was infallible and that we could include within its fold all our educable people. Such claims are on the very face of them absurd, and when once we admit that the

Universities should function as great research centres, their portals should be opened wide to any one, hall-marked or not, who has given evidence of originality or keenness. It will be difficult to assert for any educationist that such a catholicity will not make for much progress. On the contrary, knowing what a minute fraction of our people are receiving education, the hopeful uncertainty of 'full many a flower is born to blush unseen', would justify this departure from the orthodox notion of exclusiveness. If one took a census of the greatest of world's men and women, I fear he would be surprised to discover that the majority of them owe very little to Universities or indeed to any educational system. Shakespeare knew little Greek and less Latin. Our Keshab Chandra Sen and Rabindranath, Sarat Chandra Chatterjee, the prince of novelists and story-writers, Girish Chandra Ghose, the foremost of our dramatists, never crossed the threshold of the University. Whilst on the one hand, therefore, the charge of handling mediocrity in the University system is not altogether unfounded, the current Emersonian aphorism that 'Universities are hostile to genius', is, on the other hand, not wholly justifiable. Whilst Universities should be anxious to invite real

workers for human progress, we on our part should see that they are rendered independent to do so. If I may quote from Mr. Wells, 'they (future Universities) will offer no general education at all, no graduation in arts or science or wisdom. The only students who will come to them will be young people who are specially attracted and who want to work in close relation as assistants, secretaries, special pupils, collateral investigators with the devoted and distinguished men whose results are teaching all the world.'

I will now turn to the consideration of the 'regional' character of your University, a circumstance from which a State cannot perhaps escape when it undertakes to *control* and *maintain* its whole educational system. It is clear that the success or failure of this regional scheme depends entirely upon the broad-mindedness of the State itself, and on the continuance of the policy of co-operation between its various departments and the University. In short, a regional university is often made to synchronise with the political phases of its originator, the State, and as such its destiny is uncertain. I am, therefore, ever conscious of the limitations of such a system from the point of view of the

highest educational ideal. Looking, however, from the practical point of view, such a scheme is the only rational one to be followed by a self-contained State, and in fact paradoxical as it may seem from its name, it does not ordinarily exclude the ideals and aspirations of a University in the widest possible sense. A very important issue has to my mind been raised by this departure of yours. I will explain it by referring to the case of the Dacca University of our province which unfortunately is essentially a replica of the Calcutta University. Now my contention is, 'Was it necessary within the same province and within 16 hours of easy communication to duplicate an institution? Would it not have been much better to create in Dacca a University centre having special reference to the study of agriculture, jute, hide, fishery, forest products, boat and bridge-building, etc., and thus supplement the courses falling short in Calcutta and introduce research on problems of local interest?' To me it appears wanton; raising of stereotyped Universities without regard to 'regional' considerations is wasting economic power. And more. The very functions of Universities which are so fundamentally different from those of schools are made to approximate each other.

Let us not then call such Universities by that dignified name, or if that is to be, the abode of our highest ideals of education and culture must be christened otherwise. Unfortunately, the misunderstanding of the functions of the two is too common, and we have thus amidst us a system which satisfies the requirements of neither. No wonder, therefore, the share of Indian contribution to the stock of world's modern culture and knowledge is as yet so small! Now, in your University if you are strictly logical in your conception of regional university, you cannot go on adding faculty after faculty without due consideration to your regional needs. Naturally this remark does not apply so well to the humanistic faculties; but so far as the science faculties are concerned, it would be only proper if you rather stuck on to your regional notions. Thereby you will not only have introduced economy in your education, but will have made the University a living consulting body on matters of technical importance. Thus the University will ultimately be a productive institution, thriving by its own potence and not obliged to go round with the begging bowl! The vast industrial enterprises owned or initiated by the State will be the training ground of not only those that will subsequently

choose industrial career, but will afford untold facilities to the expert investigators of the University, whose discoveries will bring wealth and fame to the State! This is an advantage which we in Calcutta cannot claim. As it is, the State departments or State manufactories are practically sealed books, and then there are not very many of them.

I want here to make a few observations in connection with your intended department of technology about which I found a reference in your Vice-Chancellor's remarkable introductory speech on the Report of the University Reorganization Committee on the 28th November, last year. Our experience of University technological education dates from six years back. The department was started with a pupil and colleague of mine at its head, well-trained both in the Universities and factories at home and abroad. Thoroughly conversant with local industrial conditions, and conscious of the inadequacy of fundamental training in the schools and colleges, he has been forced to make a compromise between the higher University ideal and the technical degree course. I frankly admit, he could do no better under the existing circumstances, when the race has first to be brought up to an industrial

consciousness; and till the preparatory diploma and degree courses are satisfactorily established, our University effort in this direction will continue to be an amalgamation of the two.

The question may be asked why was it then that the technological course in the University was started without previously creating diploma and degree courses? The answer is not unknown to your Vice-Chancellor. The princely gift of the late Sir Rashbihari Ghose brought this course of study within the curriculum of the University, and although the main object of the endowment is to promote research in technology which is being so successfully fulfilled in the departments of Applied Chemistry and Physics, the creation of post-graduate courses in them was found necessary to recruit specially trained young men for the very purpose of research on the one hand, and for supplying the demand of manufacturing concerns on the other. The experience of the last six years has thus placed in our possession useful data for initiation of the junior courses which are contemplated at an early date, and as every year is passing, we are noticing a conspicuous improvement in the quality of the trained young men who, we hope, will soon prove their usefulness by being captains of

industry! But in this happy expectation I am forced to strike a note of aged despondency. As I have already said, the advantage which your University students enjoy to-day or would continue to enjoy till many years, is not in the luck of the Bengalee students. Already signs of over-production in the technological department are in evidence, and I fear if the productive industries do not increase in number or extend their enterprises, their education would be an economic waste. If, on the other hand, in spite of their University education, they would view manual labour in its true perspective and realize its dignity, they would continue to earn their living no less satisfactorily than the so-called lucky 'Service' men. I know there are hundreds of uneducated soap-makers on the other side of the Canal in Calcutta whose capital ranges from Rs. 500 to Rs. 50,000 who are their own experts, managers, salesmen, or boiling men, plying a successful trade, whilst our educated young men with spectacles, chair and table, are unable to support themselves. This should be an eye-opener. Lord Leverhulme's example should stimulate them. He commenced his career as an apprentice in a small grocer's shop. Whilst cheerfully preparing to embrace manual

labour, they should be happy in the consciousness that their education has given them an advantage over their uneducated competitors in that the key to the secrets of nature is in their possession—it is now for them to wait and opportunely use it. I wish it were otherwise but I regret that our social and educational systems are equally responsible for this state of utter helplessness of our young men. Degeneration started by the absence of a general sustaining ideal in the nation, a life of luxury and self-indulgence with some or the most depressing poverty with most, soon bring the brightest of our young men to a state of both intellectual and physical torpor. And education which should have elevated them, completes their wreck by supplying notes and digests!

Few probably pause to think now-a-days what the austere system of our past stood for, and what priceless reward in the shape of self-reliance it gave. In the abundance of heritage we are forgetting how to keep it. Of Carlyle and his contemporaries his biographer Froude says :—

"They had no one to look after them either on their journey or when they came to the end. They walked from their homes, being unable to

pay for their coach-hire. They entered their own names at the college. They found their own humble lodgings and were left entirely to their own capacity for self-conduct. The carriers brought them oat-meal, potatoes and salt-butter from the home farm, with a few eggs occasionally as a luxury. With their thrifty habits, they required no other food. In the return cart, their linen went back to their mothers to be washed and mended. Poverty protected them from temptations to vicious amusements. They formed their economical friendships: they shared their breakfasts and thoughts and had their clubs for conversation or discussion. When term was over, they walked home in parties, each district having its little knot belonging to it; and known along the roads as University Scholars, they were assured of entertainment on the way. As a training in self-dependence, no better education could have been found in these Islands."

I would earnestly plead, therefore, whether one is a votary of technology or of the school of Humanity, that the University of Mysore do not spare itself in checking those elements in its educational system which may tend to subvert self-help in the student community. "Live

hard", as said the iron philosopher, and yours will be the golden harvest.

Now, returning back to technology: A State or a country that aspires to be economically independent must develop all its natural resources to the fullest. As in a land where agriculture is the common source of living, the people must be agricultural in their bend, so must you who aspire after developing your natural resources create a technical bend amongst your population. It is a type of economic development with which Indians came to be acquainted only recently, and unlike agriculture, its manipulation and utilization would have to be acquired by bringing into existence altogether different traditions even in our primary schools. The mechanical bend of mind would have to be fostered, and the powers of accurate observation and experiment would have to be cultivated not at a later stage as is being done to-day, but from the very beginning. This is very important, and in fact the usual habit of feeling satisfaction at having been able to do a thing good enough must be discouraged. I know if I were to ask twenty young men here to measure a piece of wood, probably all of them would come near enough the true measurement, but not one would give its true dimension.

These near-enough habits would have to be eradicated if any real success in technical education is to be achieved. Mechanical education which we were inclined to despise, the kindergarten methods and the like so powerful in developing observational powers in children, would have to be introduced to bring within the fold of education many more children whom we had by our older methods given up as hopeless.

I would just quote the working routine of a German school for very young boys and pass on [*Lexis*, Vol. iv]:—

	Lower Grades	Middle Grades	Upper Grades
Religion	4 hours per week	4 hours per week	4 hours per week
German	11 „ „	8 „ „	8 „ „
Arithmetic	4 „ „	4 „ „	6 „ „
Drawing	— „ „	2 „ „	2 „ „
Nature Study	— „ „	6 „ „	6 „ „
Singing	1 „ „	2 „ „	2 „ „
Gymnasium & Hard work	2 „ „	2 „ „	2 „ „

It would appear from the above that Drawing and Nature Study are included as courses of instruction even at the infant stage. Their significance need not be dilated upon. Whilst the latter supplies the themes, the former is as though the language of the Machine age!

So great is the demand of modern civilization on classified and conscious knowledge that

to overlook science and its practice even at the very early stage of teaching is no longer justifiable. The apparent difficulty in introducing such studies at the infant stage arises mainly from our erroneous method of instruction. If the themes come first, the interest of children is so far excited that in the very effort to probe into them they will ungrudgingly learn the disciplines. Thus in the course of studying phenomena, they will be compelled to get enough exercise in reading, writing and arithmetic. There is no danger that they will fail to learn these things without which they cannot study any of the themes. Herein comes the use of museums, galleries, exhibitions and the like, which are up-til to-day being used only by the adult, and that too indifferently. A large number of real teachers is thus necessary if we want to put the whole educational machinery into a correct form. And, as every well-trained child is an asset to the State, which ultimately brings wealth and prosperity to it, I leave it to the State to find out what position education should occupy in its Budget. Economy in education is a misnomer.

Gentlemen, I have yet two more points to emphasize upon before I conclude to-day. The first is essentially connected with inter-University

relationship, and the second, the establishment of central institutes in different parts of India for promotion of research. The usual practice of inviting specialists for short courses of lectures though stimulating, is to my mind only a make-shift. If these distinguished men could be persuaded to reside in our Universities for periods of not less than six months, the impetus which we would then receive, and the research they would then be able to initiate would have lasting effect on the workings of the University. This intellectual exchange will lead not only to progressive realization of human cultural aspirations, but will bring in its train a deeper sympathy for the world of human relationship. In that state, a Brahmin, a non-Brahmin, a Muhammadan or a Christian, the yellow, brown, black or the white will vanish, but they all will be considered a unit in the brotherhood of men.

The establishment of central research institutes is not a new phenomenon in this State, and Mysore probably has shown its highest appreciation of this system by her generous support to the Indian Institute of Science. I only deplore that in this continent of India where Nature has been so bounteous, many

more institutes like the one in Bangalore should not already have sprung to explore into her resources. There can be no question to-day that human efforts, whether cultural or material, should abandon that straggling and isolated career of the past, and consent to team-work. These central institutes would have to divest themselves from all 'regional' traits and work in harmony for the common good of the nation. Without being so, they can never be international.

Gentlemen, I will now conclude by showing you once again before I part what colossal waste of national intelligence we have allowed in the past by our scheme of University education, and how unqualified for the practical matters of life we emerge out of this machinery. I shall allude to the most heart-rending analysis of the situation by no less a man than Mr. K. Srinivasa Iyengar who in the course of his Vice-Chancellor's speech in 1920 stated:

"Of 18,500 graduates of the University of Madras whose careers have been traced, some 3,700 have spent their lives in Government or administrative service, about an equal number are engaged in the teaching profession, and nearly 6,000 have gone into law. Medicine has

had only 765 devotees, Commerce only 100, and Science a tiny fraction of the whole, 56." "You will search in vain," said he, "for any solid contribution to the sum of human knowledge amongst this magnificent number of 18,500." !

On top of this comes the news communicated only the other day by the Associated Press :

"Owing to large flux of candidates about one thousand four hundred and fifty in number taking degrees in person this year, the Syndicate of Madras University has decided to hold two convocations next Thursday, the first being held at 2 P.M., presided over by the Vice-Chancellor and lasting for about half an hour. The second convocation will be held at 4-30 P.M., the same day at which the Chancellor will preside."

In other words, the two Universities of Calcutta and Madras have become two huge factories for mass-production of Graduates ! This inordinate, insane craze—almost a mania—for securing a degree has been working infinite mischief—it has become almost a canker eating into the very vitals of intellectual life and progress. A serious drawback incidental to, and I am afraid, almost inseparable from the present ill-understood and misconceived notions of University training is that the young men thus turned

out betrays, as a rule, lamentable lack of initiative, resourcefulness and pluck when he is thrown upon the world and has to fight his way through it. The testimony of some of the greatest of men in Science or in practical business will reveal the urgent need for reform in our Universities. "I would not give a penny for the ordinary College graduate," says Edison. "An educated man is not one whose memory is trained to carry a few dates in history—he is one who can accomplish things. A man who cannot think is not an educated man however many College degrees he may have acquired" (Henry Ford). By a curious coincidence almost at the moment I was writing these lines, my eyes accidentally caught the telegram conveying the notable pronouncement by Mr. Morris who has been called the "Ford of England": "For business a University training is an absolute waste of time. Though there are exceptions, I never found a University training any use to my organization. The University won't confer the qualities essential to Commerce, but obliterates them if originally present. It does not give an understanding of the Workers' psychology which is essential to carrying on large scale business. They absorb the idea that life is an easy thing and pay too great attention to sport and pleasure."

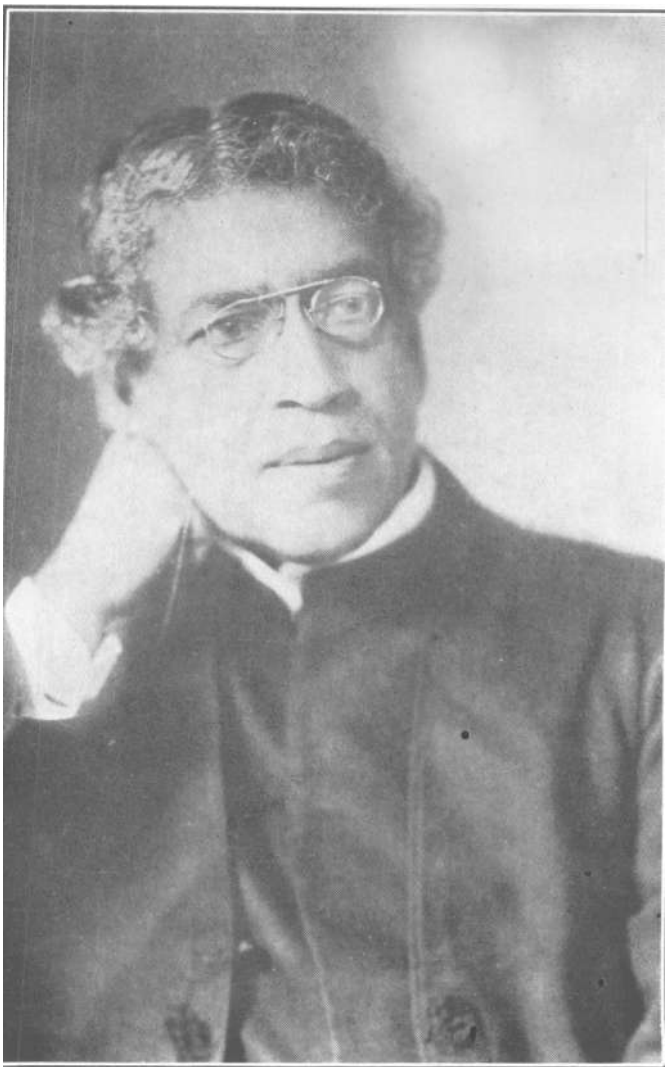
My intimate connection with several industries in Bengal for the last 30 years and more has given me a rude shock and sad experience in this respect, as far as University products are concerned.

My audience, I am afraid, is getting a bit nervous as being invited to address a convocation of graduates, it may be thought that I have been utilizing this opportunity to preach a sermon against University education altogether. Nothing is further from my purpose. My object is to sound a note of warning against the feverish craze in our young men to secure a degree, and the same to those Universities themselves who would lose sight of their highest ideals. I have already pleaded for a considerable elimination in the process of selection. No one should choose a University career unless he feels that he has an instinctive and internal vocation for it. A University should be a centre of scholarship, research and culture. Let those seek the portals of the academy who are prepared to dedicate their lives at the altar of Saraswati, the Goddess of Learning. It has been my happy lot to enjoy the hospitality of a good number of colleges in the United Kingdom on two occasions as a delegate of my University to

the Congress of the Universities of the Empire. What struck me most on each of those occasions was the richness of their products and our own poverty. Colleges of Cambridge or Oxford are reminiscent of the memory of the great men who shed lustre on their land; they have produced poets, orators, statesmen and men of science. A fellowship at one of these great seminaries of learning has enabled many a poor scholar to cultivate literature or science. If Trinity College, Cambridge, can boast of a Newton, she can equally claim one of the greatest of the men of letters—Macaulay—as her own. A University should be a focus radiating effulgence of learning and wisdom.

I tremble with joy when I think of the mighty service which University and well-guided education could offer to the nation in the course of a single generation, and my optimism soars even so high as to predict that with increased understanding of the power of knowledge, it would be possible to combat and banish disease, enliven all homes by prosperity and raise the human species to a much nobler height of intelligence. In this goal, think what part a University plays! In the words of Bertrand Russell, "All great art and all great science

spring from the passionate desire to embody what was at first an unsubstantial phantom, a beckoning beauty luring men away from safety and ease to a glorious torment. The men in whom this passion exists must not be fettered by the shackles of a utilitarian philosophy, for to their ardour we owe all that makes man great." This is the function of a University.



Sir Jagadis Chandra Bose. Kt., C.S.I., C.I.E., M.A., D.Sc., F.R.S.

Address delivered at the Convocation of the University of Mysore, on the 3rd November 1927, by Sir Jagadis Chandra Bose, Kt., C.S.I., C.I.E., M.A., D.Sc., F.R.S.

YOUR HIGHNESS, LADIES AND GENTLEMEN,

When I received His Highness the Chancellor's gracious invitation, I realized anew the unity of intellectual life of India and its continuity from the most ancient times. His Highness' kind thought in asking me to deliver the Convocation Address has probably been prompted by sympathy and appreciation of my efforts, now extending over more than a third of a century, to revive in some measure the great intellectual traditions of this great country. Many years ago I chose teaching not as a profession, but as the highest vocation. I could think of nothing higher than consecrating my life to the guidance of the young with their dreams and aspirations yet unfulfilled and in helping them in the attainment of manhood. I see before me young students going out in life's great adventure. What is to be the guiding principle that is to stand by you and inspire you even in days of despondency? There never came a time so fateful as the present

when a great demand is made on the strength and idealism of our youth in serving the highest interest of the country. I will not, therefore, appeal to your weakness but to your strength; I would not care to set before you what is easy but use all compulsion for your choice of the most difficult. You are seekers after truth; I will tell you of the discipline through which you must pass for the discovery of truth. In this the heritage of the past will help you; but you are not to be a mere slave of the past but the true inheritors of its wisdom.

I was paralysed at the beginning of my life by various hypnotic suggestions that India was only interesting because of metaphysical speculations of her ancient dreamers, and that the greatness of the country was past and never to be revived again.

You may ask who taught me better, what was the stimulus that enabled me to shake off the lethargy of despair? My answer is that my own work was my teacher, that strokes of repeated adversity served as the requisite stimulus, and that the lessons of the past have been my abiding inspiration. I fully realized that there can be no true revival except through the awakening of all that had been conserved in the national

life by inheritance and culture. Such an awakening will be the release of a giant force, hitherto held latent, for dynamic expression in the great Indian renaissance. The stimulus for this must come from within, the portent of which is found in the quickened national consciousness.

In my address this morning I will not speak of anything that is impossible of attainment or of things that have been accomplished only in other countries, but what can be done or has been done in India. I have been, and am still a student; your struggles and difficulties have also been mine. In your hours of despondency it may perhaps help you to know that not even a glimmer of success ever came to remove the gloom except after years of persisent struggle I held the belief that it is not for man to complain of circumstances, but bravely to accept, to confront and dominate over them. I know that what has been done before will be accomplished again and that the past was not to remain merely as a dream.

I spoke of my Work itself being my teacher The illumination came to me only after years of unremitting pursuit after truth. It was this that enabled me, through rigid scientific methods, to establish the great generalization of the Unity of

Life and to realize fully all its implications. I will tell you what I was able to decipher in the book of life itself, of conditions which exalt the highest manifestations of life.

The Life of the Tree.

The tree may be likened to a State consisting of countless living units, different groups of which co-operate in the discharge of definite functions for the advantage of the community; any disharmony in the organism means the destruction of the commonwealth. The tree persists because it is rooted deeply in its own soil which provides its proper nourishment and endows it with strength in struggling against all dangers that threaten it. The shocks from outside had never been able to overpower it, but only called forth its nascent power of resistance. It had met change by counterchange; the decaying and the effete had been cast off as worn leaves, and changing times called forth its power of readjustment. Its racial memory had also been a source of great additional strength; every particle of the embryo within the seed may thus bear the impress of the mighty banian tree. What then is the strength that confers on the tree its great power of endurance? It is the strength derived from the place of its birth, its perception and

quick readjustment to change, and its inherited memory of the past. The efflorescence of life is then the supreme gift of the place and its associations. Isolated from these what fate awaits the poor wretch nurtured in alien thought and ways? Death dogs his footsteps, and annihilation is the inevitable end.

A National University.

The highest expression in the life of a nation must be its intellectual eminence and its power of enriching the world by advancing the frontiers of knowledge. When a nation has lost this power, when it merely receives and has nothing to give, then its healthy life is over and it sinks into a degenerate existence which is purely parasitic. The status of a great University cannot be secured by any artificial means, nor can any charter assure it. Its world status is only to be won by the intrinsic value of great contribution made by its scholars. To be organic and vital, our national university must stand primarily for self-expression and winning for India her true place among the federation of nations.

Critics have denied India's capacity for advancement of knowledge and spread of learning among her people. It has been urged that there is no true democratic spirit, that there could be

no real contact between her diverse peoples, and no continuity between the past and the present; that there is an intolerant theocratic spirit which insisted on an acceptance of authority in place of dictates of reason; that the people of India because of their speculative bent are incapable of advancing positive knowledge; and that the exact method of science being Western is alien to national culture. These assertions are as ignorant as they are baseless.

The Democratic Spirit.

I do not know of any other country of the world, except ancient India, where sons of kings and commoners were required to live a life of simplicity and perfect equality under a great teacher. In our great epic we read of a great tournament that was held before the court of Hastinapura more than thirty centuries ago. Karna, the reputed son of a charioteer, had challenged the supremacy of Prince Arjuna. To this challenge Arjuna had returned a scornful answer: "A prince could not cross swords with one who could claim no nobility of descent." "I am my own ancestor," replied Karna, "and my deeds are my patents of nobility." This is perhaps the earliest assertion of the right of man to choose and determine his destiny. Turning to

recent times my father insisted on my attending the Vernacular instead of the more fashionable English School. This brought me in friendly contact with sons of toilers, those who tilled the ground and made the land blossom with green verdure and ripening corn, and the sons of fisher folks who told of strange creatures that frequented mighty rivers. From them I derived my passionate love of nature. I learnt to think in my own language and receive through Indian epics the heritage of our national culture. I also came to realize the ideals of our ancient State, of a Vikramaditya and his Court, which was never regarded as complete without the "nine gems" which represented different branches of learning. The people offered homage to the State not because it was panoplied by mere physical force, but because it aspired to make more enduring conquests in the realm of mind and spirit.

Continuity of Intellectual Life in India.

In regard to the spread of learning geographical barriers have never in the past offered any obstacle to the intellectual communion among the different peoples of India. The vision of the past rises vividly before us, and we behold a great procession of immortals who still live and inspire

us. We see Sankaracharya acclaimed everywhere during his march of intellectual conquest of all countries from the south to the extreme north. We see the scholars of Bengal with a few palm leaf manuscripts as their sole treasure, crossing the Himalayan barrier, inspired by love and service, to carry Indian lore to Tibet, to China and to the further East. The great intellectual movements were never confined to any particular province, for the torch of learning was kept lighted for many centuries in her different universities. And it was the fame of a great teacher that drew scholars from even the most distant corners of India. The traditions of the past have not been lost, for even to-day leaders of thought from different provinces travel from one end of the country to the other, thus keeping alive the bond of unity and closest kinship. Those who have read history aright realize the great assimilative power of Indian civilization by which many races and peoples came to regard this great country as their home. And it is by their joint efforts that will be built the Greater India yet to be.

Freedom of Inquiry.

It is perfectly true that nothing could be so detrimental to the furtherance of truth than a

narrow theocratic bias and intolerance in accepting new facts and doctrines that run counter to narrow orthodoxy. One is, however, constrained to say that this narrow spirit is more in evidence in the West than in the East. Galileo's recantation under compulsion and Bruno's being burnt at the stake are facts well known. The spirit of intolerance is still alive as exemplified by the bitter controversy that has recently arisen regarding the Darwinian theory, and the penalizing of the teaching of evolution in a certain State of progressive America. There is a priesthood even in science, and it is notorious how seldom a great discovery finds appreciation during the life of its author.

In regard to the question whether theocratic bias obstructed free pursuit of inquiry in this country, the fact is well known that two schools of thought flourished here side by side, one of which relied on faith and was supported by established authority. The other based itself on pure reason and refused to accept anything which could not be substantiated by objective proof.

No false claim should, however, be made that our ancestors were omniscient and that no further advance of knowledge was possible. What they attained was through unremitting

efforts in building the edifice of knowledge step by step. Even after all they had achieved they had the greatness to declare that even the Vedas are to be rejected if these do not conform to truth. It is false patriotism that would claim credit for anything less vital than the supreme gift of freedom of inquiry that had been bequeathed to us.

India's Contributions in the Past.

Nothing can be more vulgar or more untrue than the ignorant assertion that the world owes its progress of knowledge to any particular race. The whole world is interdependent and a constant stream of thought has throughout ages enriched the common heritage of mankind. It is the realization of this mutual dependence that has kept the mighty fabric bound together and ensured the continuity and permanence of civilization.

Nevertheless ignorant assertions have been made that advance of Science and State-craft are entirely due to the contributions of the West. It must be a matter of high gratification to the Mysore State that two of its distinguished officers should have, by their patient labours, succeeded in lifting the veil that shrouded the past. The pioneer work on the *Positive Sciences of the*

Ancient Hindus has been the result of vast erudition of the Vice-Chancellor of this University. No less important is the remarkable contribution of Dr. R. Shama Sastry whose patient and ardent scholarship has brought to light Kautilya's *Arthasastra*.

Can we, however, remain satisfied only with the traditions of the past? Critics have told us time after time that whatever the past might have been, there is now no strength left for the renewal of our national life. They point out that while success in our national efforts have been few and far between, the failures have been far too many. But failure is only transient, while success waits for us round the last corner. It is the obvious and the blatant that blinds us to the essential. Few realize the great urge hidden to the eyes of men, that is moving the great mass of the people in their ceaseless efforts to realize some common aspiration. Where lies the secret of that potency which makes certain efforts apparently doomed to failure, rise renewed from beneath smouldering ashes? When we look deeper we shall find that as inevitable as is the sequence of cause and effect, so unrelenting must be the sequence of failure and success. We shall find that failure must be the antecedent

power to lie dormant for the long subsequent dynamic expression which is acclaimed as success.

India's Contribution in Advancement of Modern Science.

Although science is neither of the East nor of the West but international in its universality, yet India by her habit of mind and inherited gifts handed down from generation to generation is specially fitted to make great contributions in furtherance of knowledge. The burning Indian imagination which can extort new order out of a mass of apparently contradictory facts can also be held in check by the habit of concentration ; it is this restraint which confers the power to hold the mind in pursuit of truth in infinite patience.

Two different methods are essential for the discovery of truth, the method of introspection and the method of experimental verification. Aimless experimentation seldom leads to any great result, while unrestrained imagination leads to wildest speculation subversive of all intellectual sanity. The two methods must therefore be equally balanced, one supplementing the other.

The real difficulty that thwarts the investigator of life as exemplified by plants arises from the fact that the interplay of life-action is taking

place within the dark profundities of the interior of the tree which our eyes cannot fathom. As the first step to discover the hidden mechanism of the tree, one has to become the tree and feel the pulse-beat of its throbbing life. Next, in order to reveal the intricate mechanism of its life, it is necessary to gain access to the smallest unit of life, the "life atom", and succeed in recording its throbbing pulsation. For this it was necessary to invent instruments of surpassing accuracy and sensitiveness. The invention of the microscope magnifying only a few thousand times initiated a new era in advance of biological science. The Magnetic Crescograph magnifying fifty million times is now revealing the wonders of a new world, the plant itself being made to reveal the secrets of its inner life. Even in this path of self-restraint and verification, the inquirer is making for a region of surpassing wonder. When visible light ends, he still follows the invisible. When the note of the audible reaches the unheard, even then he gathers the tremulous message. A new world opens out to him beyond our conceiving, the vast world of inarticulate life, which suffers and struggles even as ourselves. Is it less of a miracle that man undismayed by the imperfection of his senses should yet build

himself a raft of thought to make daring adventures in uncharted seas! And in his voyage of discovery he catches an occasional glimpse of the ineffable wonder that had hitherto been hidden from his view. That vision crushes out of him all self-sufficiency, all that kept him unconscious of the great pulse that beats through the universe. It was by the combination of the introspective and the highly advanced experimental methods that it was possible to establish the Unity of Life; the barrier that divided kindred phenomena vanished, the plant and animal being found as a multiple unity in a single ocean of being.

The new results are so revolutionary in their implications upon the older theories regarding the functioning of plant life, that there was controversy in 1920 as to the reliability of the indications of my super-magnifying instruments. An enquiry was, therefore, undertaken by Committee of leading Fellows of the Royal Society including Lord Rayleigh and Sir William Bragg the famous physicists, Sir William Bayless the animal physiologist, Professor Oliver and Blackman the plant-physiologists, and Professor Donnan the chemist. They reported as the results of various tests, that the crescograph correctly recorded growth and the actual response

of living tissues to stimulus. It is worth noting that these and other extraordinary sensitive instruments were all constructed by Indian mechanicians trained in my Institute. It is necessary to lay special stress on this point at this juncture when the assertion totally ignorant and unfounded is made that lack of faculty of discovery and invention renders this country incapable of making any great industrial advance.

The Control of the Mind.

These wonders became revealed to me only after years of struggle in overcoming difficulties which at first appeared as almost insurmountable. It was the Indian habit of concentration that led ultimately to the overcoming of all difficulties. It is no easy life that lies before an investigator. He has to steel his body and mind to the utmost and prepare for a life of unending struggle. Even after all this there is no assurance whatever of success to reward him for his ceaseless toil. He has to cast his life as an offering, regarding gain and loss, success and failure, as one. But the lure that draws heroic souls is not success that can be easily achieved, but defeat and tribulation in the pursuit of the unattainable.

Utility.

I have often been asked: what could be the practical use of these researches on the recondite phenomena of the life of plants? A similar question was also asked when so far back as 1894, I succeeded in transmitting energy by wireless electric waves for starting machinery at a distance and exploding a distant mine. The invention of the galena receiver in my laboratory also solved the difficulty of long-distance transmission. All this was regarded at the time as a mere scientific curiosity.

Regarding the practical applications of discoveries in plant life, researches on growth have been rendered possible by the invention of the High Magnification Crescograph. The laws of growth are now being discovered, a knowledge of which is essential for any real advance in practical agriculture. Another important advance has been made by the discovery of identical reaction of various drugs on plant and on animal life. This has led to investigations on the action of extracts from various Indian plants, the medicinal properties of which had not hitherto been suspected, and by the employment of which the heart machine can be regulated and rendered highly efficient. The newly invented Resonant

Cardiograph inscribes the different phases of the heartbeat with wonderful minuteness and reveals the specific action of different plant-extracts in reviving the activity of the heart in a state of depression. From the results of these investigations, an entirely new arsenal of medicine obtained from Indian plants will be available for the relief of humanity.

An altogether different line of advance has also been made in regard to the tracing of gradual evolution of nervous system from the simplest to the most complex. In the simpler vegetable life, where lies the plant-psyche, the faint copy of our consciousness? A nervous structure I have been able to discover in the plant, the characteristic reactions of which are likely to lead to the better understanding of the parallel phenomena in our own psychic life. A plant carefully protected under glass from the stimulating blows of the environment looks flourishing but in reality it is flabby and decadent, its highest nervous function having remained undeveloped. But when the same plant is exposed to the rough shocks of the environment, then its nervous structure becomes fully developed. In human life also, it is not cotton-wool protection but blows of adversity that evolve true manhood.

Indian Initiative in Matters Educational.

I had occasion recently to take part at the great International Conference on Education held at Locarno. They realized that the old system hitherto in vogue was quite antiquated and that new initiative must be taken in methods of education. The imported method hitherto in vogue is quite out of date and must therefore be modified and made a living force for the wakening of national aspiration and efficiency. A system which holds forth no other hope but perpetual tutelage cannot but be deadening. Nothing could be more humiliating than the position of Indian students in Europe, a situation which for many reasons is full of danger. Why should we not aspire to found great centres of learning? It was this idea which led to the foundation of my Institute ten years ago by which I hoped to revive the great traditions of our country, which, many centuries ago, attracted scholars from all parts of the world, within the precincts of its ancient seats of learning, at Nalanda and Taxila. That dream of mine has now been amply fulfilled. May I not hope that what has been accomplished would be carried out with even greater power by this enlightened State? You must, however, be inspired by as indomitable a faith. In justification

of that faith it was necessary to indicate briefly what was accomplished by Indian initiative and by Indian scholars.

The Economic Peril.

Increasing unemployment and severe economic distress is the cause of unrest here as in other parts of the world ; only on account of its magnitude the problem is far more acute here. It is hunger that drives people to desperation and to the destruction of all that has been built up for ordered progress. It is tragic that our own country with its great potential wealth and possibilities of industrial development should be in this plight. All efforts have been long paralysed by assertions, as ignorant as they are unfounded, that this country is incapable of producing great discoverers and inventors. These assertions have now been completely disproved.

In other parts of the world, it is the best intellect of the country and the leading men of business—who are called to devise means for increasing the wealth of the country. In my travels I found little or no distress in small countries such as Norway and Denmark, countries which are in no sense rich in natural wealth. Nevertheless they have their system of universal

education and the most up-to-date university. Poverty is practically unknown. The miracle is accomplished through science by utilizing to the utmost all the available resources of the country. Could we not take to heart the lesson thus taught? There are now a very large number of young men who could be specially trained in efficiently conducted institutes, the standard of which should bear comparison with any in the world. It should be also our aim not to be so entirely dependent on foreign countries for our higher education and for our needs. For carrying out such a programme, a far-sighted State policy is urgently required. But there is a strange general apathy on this question. It is a matter of much gratification and pride to us to know that the State of Mysore has given its most serious attention to this subject.

A Vicious Circle.

When man beheld spread before him the earth, the sea and the air, he went forth in his great adventures. He rode the tumultuous sea and circled the globe. The challenge of the sky he accepted and by his daring spirit conquered it and established an unobstructed highway. Man is a creative being and these miracles attest to his godlike and indomitable spirit. But the

weakling, who has forgotten the divinity that is in him, leads an ignoble life of passivity. He alone who has striven and won can enrich the world by giving away the fruits of his victorious experience.

A strange weakness and passivity has entered into the life of the people, and unless the evil is remedied, the end is inevitable. Nature shows no mercy to the feeble and the decadent. The vicious circle lies in this: the lazy is content with earning what is barely sufficient to maintain life itself; the evil increases at a compound rate, reducing further the capacity for work, and also the power of resistance to ills that beset life ending in the lowering of scale of human life, starvation and death. In other countries, even under stress of great national disaster, the human efficiency has remained unimpaired due to the joint efforts of the people and the State in building up national prosperity.

There is a special need for an enlightened policy in regard to the shaping of the post-graduate career of the most distinguished students of the university. Many of my old students showed special aptitude in science; but as there was no scientific career open for them, they were compelled against their natural inclination to choose

the profession of law. None but the intentionally blind can fail to realize the crisis to which things are tending in a country where distress is so widespread and where the only scope for intellect is the pursuit of tortuous and uncertain course of the law courts.

In contrast to this, I had the opportunity of becoming acquainted with the solicitude with which the Government of Japan follow the career of her promising students whom they regard as the greatest asset for the advancement of their country. I found them personally known at headquarters, and arrangements made through Japanese Consuls in Europe and America, so that in the course of two years they go through a very special training under the most distinguished specialists to make them efficient in their subjects. They do not find themselves stranded on their return, for arrangements had already been made by their Government so that their intellect and training find the fullest scope in the service of the State.

The Ideal of a Model Indian State.

This leads me to the ideal held by this State which found practical expression in the establishment of the national university and in many enterprises for the welfare of the people. The

university and the industrial enterprises cannot be dissociated from each other but must be regarded as complementary activities for the common good of the State. There are other countries more fortunate which can shower their millions on a particular department of learning. We have no millions to spare and have therefore to utilize to the utmost the available resources. But is this to deter us, is the mind of man with his indomitable spirit of no account?

What could be the reason of the high efficiency in administration of this State? Is it because the Ministers are in close touch with the people realizing their prosperity redounding to the credit of the State? It is worth enquiry how some of the greatest Indian administrators found full opportunity for the expansion of their genius in the premier States of India. The genius of Sir K. Seshadri foresaw the great possibilities for utilization of undeveloped resources of Mysore; his abounding energy found proper scope in great schemes for irrigation and in the electric trapping of power that had hitherto run to waste. Who can truly appraise the value of these achievements or measure the stimulus given to young minds trained in this University for the unique opportunity offered for the highest

development of their latent powers? Industry and research will act and react on each other to the lasting benefit of both. To Sir M. Visvesvaraya, another Minister of this State, is due the credit of Bhadravati Iron Works. In this State men are not mere dreamers, but they have the strength and persistence to see their vision realized. What could be the source of their inspiration? Is it the love of the country and loyalty to an ideal State which had nerved them to supreme efforts?

Teaching and Research.

Teaching and research are indissolubly connected with each other. The spirit of research cannot be imparted by mere lectures on antiquated theories which are often entirely baseless and which effectively block all further progress. Nothing can be so destructive of originality as blind acceptance of *ex-cathedra* statements. The true function of a great teacher is to train his disciples to discover things themselves. Such a teacher cannot be easily found and it will be the duty of the university to discover him and give him every facility for his work. Let there be no creation of a learned caste whose attention is mainly taken up in securing special privileges. It is only from a burning candle that others could be lighted. The pupils by working under

such a teacher will learn the value of persistence and of the infinite care to be taken at every step; they will catch from him glimpses of inspiration by which he succeeds in wresting from Nature her most jealously guarded secrets. They will become a part of his being and will hand down a passionate love of truth through fleeting generations. That spirit can never die; we shall pass away, and even kingdoms may disappear. Truth alone will survive, for it is eternal.

Injunction to Students.

What is to be my message to young students with whom I am brought in touch to-day? Could I wish for you anything less than that you should attain the highestmanhood or womanhood? May you realize the great privilege of being born at a time when your country needed you most! The civilziation we have inherited has lasted through many millenniums; you will certainly not allow it to be destroyed through weakness or passivity. You will answer to this call that has been echoing through ages, the call which compels men and women to choose a life of unending struggle for the alleviation of human suffering. The removal of suffering and the cause of suffering is the Dharma of a Kshatriya. Be each of you a true Kshatriya!

It was action and not weak passivity that was glorified in heroic India of the past and the greatest illumination came even in the field of battle. There can be no happiness for any of us, unless it has been won for all. In this I would urge on you the doctrine of strength and of undying hope. Realize that there is something with Indian culture which is possessed of extraordinary latent strength by which it has resisted the ravages of time and destructive changes that have swept over the earth. And indeed a capacity to endure must be innate in that mighty civilization which has seen the intellectual culture of Nile Valley, of Assyria and of Babylonia wax, wane and disappear, and which to-day gazes on the future with the same invincible faith with which it met the past.

C. R. Reddy, Esq., M.A. (Cantab.), Bar-at-Law.

Address delivered at the Convocation of the University of Mysore, on the 23rd August 1928, by C. R. Reddy, Esq., M.A. (Cantab.), Bar-at-Law, Vice-Chancellor, Andhra University.

GRADUATES,

I owe it to the courtesy of His Highness the Chancellor and other academic authorities of your University that I have the honour to participate in this auspicious function. They have shown me rare consideration for which I am profoundly grateful.

Seven years ago, under troubled feelings, I relinquished the privilege of belonging to the Mysore Service. But as my love for Mysore has known no abatement nor will know any, I rejoice to be back here in this happier hour. But the happiness of my home-coming is marred by the absence of my Bhai Saheb, as I used to call him, Mr. Humza Hussain, than whom I have not come across a more gracious or truer soul in all my varied sojourn through life. His courtesy, his urbanity, his loyal devotion to friends, his unswerving sense of duty, his unselfish and therefore bright, illuminating outlook on life, and energetic sympathy for the suffering, struggling masses in Mysore, are fast becoming, with

lapse of time, twilight memories; and alas, I can no longer enjoy the effulgence of the living sun. Death has also robbed me of the friendly greetings of Professor Srinivasa Rao of the Central College. On his return from America I did my little best to secure for him an adequate position, knowing how much salaried status counts in our bureaucratic atmosphere. And his career, so full of scientific promise and of inspiring popularity with the students, has been cut off in its prime. The sickle has mowed before the corn was ripe; yet man may not question or complain, but must bow his head in humble resignation.

The Depressed Classes Advancement Trust.

I am afraid I am falling into a reminiscential mood, which is but natural at family reunions. But as a reminiscent mood has no conscience for the time it consumes or the audience it bores, I had better avoid the unavailing retrospect and turn to living themes. Every Indian is proud of the continuous and untiring progress made by Mysore in every direction and of the ceaseless vigilance with which public interests are promoted. The dynamic impulse imparted by Sir M. Visvesvaraya, who effected a rapid and fruitful revolution in the functions of Government, seems

to be operating with undiminished, and I trust, more circumspect force. I can think only of one oversight. The scheme for a Depressed Classes Advancement Trust that I had the pleasure to propound has not yet materialized. I should not have mentioned this but for the fact that every one, not excluding the Government of the day, gave it an enthusiastic welcome. But perhaps as a publicist I ought to have known that where there is unanimity of sentiment, there is hardly incentive enough for any particular person or set of persons to act, and the will is dissolved in unctious wish. Platitudes are never so effective as contentious truths; they do not give rise to sufficient friction for the generation of motive power.

University Organization.

Speech is or should be action. The action in which I am now engaged with the generous co-operation of the Andhra academic authorities is University Organization. And I am further impelled to deal with this subject by the irresistible attraction of the grand educational reconstruction adopted within the last two years by Mysore under the guidance of your famous Vice-Chancellor. It is one of the biggest achievements in Indian educational history; and it is

bound to influence other Universities in no small degree.

I have read again and again the great speech in which Sir Brajendranath Seal introduced the new scheme in the Senate explaining its scope and how it was correlated with the psychology of our people and the needs of Mysore. It is a document in which constructive educational schemes have been thought out in every part and detail in terms of our life and conditions. To praise Sir Brajendranath Seal must sound like impertinence on my part. But that will not deter me from saying that in my humble judgment his speech deserves to rank with the greatest documents of our educational history.

Favourable Situation in Mysore.

In relation to University Organization Mysore has been exceptionally fortunate in at least two respects. You have a teaching University with a stable staff, immune from mercurial fluctuations of function and locality. And your Government is anxious to operate it in the closest possible co-ordination with its other departments of State, such as Industries, Railways, Public Works, Commerce, Banking and all the range of its administration and economic enterprises. The University is not regarded as

an interloper, and having created a University, they have not left it at a foundlings' hospital as their highest act of statesmanship, and liberally consigned it to thrive on private charity. No wonder then that in its organization on the side of substantial education and the amplitude of its activities, the Mysore University is advancing and extending with a speed and momentum that breaks my heart with envy, though as an old Mysorean I allow my humanity to prevail and rejoice unboundedly. Many faculties have been added, still more are in the process of being added; provision has been made at the different grades for vocational, industrial, technical and technological training and education; archæology and history have been brought together under one roof; the critical and scientific study of Oriental Cultures and Indology have been provided for; the Entrance and First Year Examinations have been abolished to my entire, though belated, satisfaction; and in every way justice has been done to the essentials of an œcumenical University—which is my word for Dr. Seal's International—without neglecting regional needs.

The Œcumenical and Regional Types.

But indeed I fail to see how the two types could be entirely separated and whether there

are two types at all anywhere instead of a composite one everywhere. Perhaps it is a difference of degree and not of kind. Regional elements may be found at Oxford itself, let alone Cambridge. The medium of education is English—a regional language; they don't neglect English History and Politics, and since the War, applied sciences are receiving increasing attention. Nor is Leeds, which on all accounts rendered the largest amount of national service during the Great War, without its elements of universality. Its woollen, leather and printing departments attract students from all parts of the world. The present Superintendent of your Government Press underwent, I believe, much of his training in Leeds. Even applied science is science and there cannot be a particular which does not imply a universal.

The State in Relation to the University.

But the regional idea is of inestimable value in India from another and more practical aspect. It suggests with compendious clearness the relations that ought to subsist between the State and the University. No adaptation of a University to regional requirements is possible, unless Government, which is the largest employer of labour in India, actively encourages and

promotes such an adaptation and is willing to use the University as its chief depot for supplying the human power required in all its departments and enterprises, as is done by every nation-state in the world. Government would then not merely help to lessen educated unemployment but would provide itself with an adequate motive for financing the University in order to enable it to maintain the highest world standards in all its departments and advance in the van of discovery and invention. When its own graduates are not wanted and overlooked, how is progress, material or moral, possible? Electrical, Railway, Mining, Marine and other forms of Engineering, etc., ought to be cultivated in India and to the highest degree possible, but then the State should not starve its own men in the name of an efficiency that it will not promote. Nor will throwing open this place or that place with fractional, niggardly hand meet the needs of University Organization. We cannot organize courses for one man or two. We must admit as many as we can, consistently with efficiency of teaching and practical works; otherwise the facilities in Professors and Laboratories that we provide will not be utilized to the full. Let me quote what I said on another occasion, as I

consider this point to be one of the vital elements of the regional idea :—

"National efficiency would require the organization of Engineering and other technological courses. But even here Government policy is a big factor, and Government may either accelerate or retard progress by the manner in which it provides openings in its technical departments for our qualified people. Still, the University can do its duty. As regards the argument that Government can't provide places for everyone, I consider it to be sound as far as it goes. But surely Government can do much to promote industry and commerce, and is itself the biggest industrial factor in India, and therefore its action is decisive even as regards the development of commerce and industry by private enterprise and the openings thus made available for Indians. Government need not *create* places for our qualified men ; if it fills such places as there are with them, that will suffice.

"What I wish to emphasize is that Education and University are inextricably mixed up with society on the one hand and Government on the other, and cannot be regarded as factors which can function and produce results in isolation and abstraction."

University Autonomy.

Though thus the State should foster the University by providing adequate careers within the extent possible in its organization and by the general development of the country as well as adequate funds, it should not convert either by law or administrative or financial pressure the University into a department of the State.

All the world over collegiate and higher education is organized almost without exception by Universities, though most of the modern Universities depend almost entirely on Government for their support. To create a University and then to treat it as a body to be either starved or enslaved appears to me to be what Euclid so eloquently styles *reductio ad absurdum*. The reason why Universities are financed by the State and allowed the fullest autonomy is that world experience extending over centuries has proved conclusively that such an agency is better fitted to carry out the mission of higher culture and research than a department of the State. The finest academic growths are not possible under the shadow of bureaucratic authority. As Lord Bryce put it :—

"Freedom is the life-blood of University teaching. Neither the political opinions of a

professor, nor the character of the economic doctrines which he holds and propagates ought to be a ground for appointing or dismissing him, nor ought he to be any less free to speak and vote as he pleases than any other citizen. And though it is right and fitting that the State should be represented in the governing authority of a University which it supports, experience seems to have proved that both the educational policy and the daily administration and discipline of a University ought, as far as possible, to be either left in academic hands or entrusted to an authority on which the academic element predominates."

Lord Balfour speaking more recently thus declared :—

"If the State be asked to subscribe great funds, either in this country or in any of the Dominions or indeed in any country, there will always be a natural and pardonable instinct on the part of the State to control and supervise the working of an institution which it is doing so much to support. *It is perfectly natural but it is extremely dangerous.* Cambridge, Oxford and the old Universities are receiving assistance from the State, but our University traditions are so deeply rooted that I do not think there is any

symptom, as far as my judgment goes, of any Government attempting to interfere with the University. *University autonomy, whether it be well exercised or ill exercised, is at all events at the worst far better than State control.*" (The italics are mine.)

I notice that in Mysore the Senate has been engaged in an invasion of the Syndicate and I wish the expedition every success. I hope the day is not far distant when the University staff will be omitted from the Civil List as being out of place.

The psychology of some of our Governments is at times baffling. They can't trust local bodies with power because there are not enough educated members on them. They won't trust the Universities because they have none but educated persons on them. The only category they confide in, is the Secretariat, which not infrequently functions in an atmosphere of transcendental authority mightily elevated above the reach of reason and criticism. If consistently benevolent and uniformly wise, bureaucratic absolutism may possibly make a people fat but it can never make them strong. And the weakness of the people is bound to result sooner or later in governmental debility.

But the transformation of the Mysore University into an autonomous corporation does not appear to me to be a simple process. It would involve a revision of the constitution in many respects including the system of elections now in vogue. As a way out of the dilemmas presented by the opposing considerations of liberty and prudence including the necessity for securing a predominant position to the academic element, a more complex and balanced type of constitution like the one originally recommended by some of us when the University was being founded, may, after all, have to be adopted with the changes shown to be necessary by subsequent experience.

Andhra Autonomy.

If Mysore excels in educational content the Andhra University may legitimately claim to have the better academic form, thanks to the generous statesmanship of the last Ministry and the Legislative Council. It is easily and by far the most autonomous corporation of its kind in India. Only two are nominated, and that too by the Chancellor—which in practice is a real distinction from the Governor—to the Syndicate. And the nominations to the Senate do not exceed twelve, and these again are made by the Chancellor. The University has full control of educational

regulation and all appointments in the University are entirely within the competence of the University authorities. If only this outburst of confidence in the Andhra genius to administer a University had been accompanied by an equally magnanimous financial confidence in its capacity to spend economically and efficiently by the adoption of the system of block grants and by the transfer of Government Colleges as contemplated in the Act, so that the Teaching University intended by Government might be realized, the Andhras too would have attempted constructive educational policies. But the headquarters problem blocks the way.

The Vernacular Medium.

It is with no small hesitation and nervousness that I venture to remark that the very essence of the regional idea is education as far as possible through the vernacular. I don't belittle the importance of the œcumenical or international ideal. I dismiss the œcumenical as impossible of achievement in this respect, because there is as yet no universal language. And the international presupposes that we should be a nation first and take part in world-exchanges of thought and culture as an equal. Thus both the international and the regional ideas involve instruction through Kannada

Mysore here again is fortunate to a degree that will not be possible in British India until provinces are reconstituted on a linguistic basis. Mysore is almost unitary in its language, for the Telugu that you have in your Eastern districts is twin sister to Kannada with indistinguishable lineaments. Nor is there any need or necessity for having an official language different from the people's. But we lack self-confidence on this subject. In theory we all agree that it is easier to master and spread knowledge by employing a natural instead of a foreign medium. But we are afraid of impairing the estimation in which our educational efficiency is held by others. It seems so easy to borrow the ready-made clothing of Europe; so difficult to produce the raiment ourselves. We seem to lack the imaginative power to view things in the growth. And we are obsessed by the possible discount to which our degrees would be subjected. As regards researches and original work, nobody holds that their value would depend on how excellently they are narrated in English or French; and when our Universities put forth a sufficient amount of higher work, the credit that they will thereby achieve will extend to all the degrees they confer. But I don't wish to say more on the theory of

vernacularization, which has been discussed threadbare. Only one observation may be repeated. That it need not produce a lowering in the standard of English and that every care should be taken that English is properly and adequately studied as a language. With this caution I don't see why we should not vernacularize to the utmost possible extent immediately. The Calcutta University Commission was of opinion that up to the Matriculation standard all subjects except English and Mathematics should be taught in the vernacular; and this recommendation has, I believe, been widely adopted. Since then vernaculars have made a fair amount of progress and it should not be beyond the capacity of an expert committee to determine what subjects in the Intermediate grade could be taught in the vernacular. Instead of vernacularization by grades, may we not begin vernacularization on a subject basis? May not Indian History, for instance, be taught in Kannada, from the lowest up to the B.A. and M.A. standards?

Lack of text-books is no doubt a difficulty, but men are more important than books. If the proper lecturers are forthcoming, the lectures will be forthcoming, and the books will automatically

follow. Professors at Oxford and Cambridge have a working knowledge of a number of European languages, and they are able to base their lectures on world contributions to their line of study. In the same manner those who lecture in Kannada in the University grades might be required to possess a sufficiently good knowledge of English and perhaps one other language, for them to be able to consult with advantage authoritative books written in those languages. The methods of teaching and training prevalent in the great Universities of the West proceed on the view that the mind is a vital growth to be fostered and strengthened and not an emptiness to be mechanically stuffed. They concentrate on the development of faculty and acquisition of knowledge and not on the attainment of a tongue.

In fairness to the Andhra academic authorities, who are considering this question, I must say that these are my personal opinions which it would be my duty to change if convincing arguments to the contrary are forthcoming. Further, there are some special complications which have to be taken into due account in the Andhra area, namely, correlation with competitive examinations and service conditions and the existence of other vernaculars.

Women's Education.

The regional idea can't receive its fullest application unless it includes women within its scope. And in view of the very early age at which girls are withdrawn from schools and bundled into matrimony, I don't see how the maximum amount of knowledge could be imparted unless the vernacular medium is employed, even allowing for the natural and superior sharpness of their tongues. If one of the objects of an educational system is to broadcast existing knowledge, to carry it to every household including those in the remotest villages and irrigate our darkness by channels of light, and if it is further conceded that in the conditions in which they are placed, the imparting of the maximum of knowledge in the minimum of time to girls is possible only under the regime of the mother-tongue, it is a matter for consideration whether India should decide for a differentiation of her media of instruction on a sex basis, making English the medium for boys and the vernacular the medium for girls !

Women's education deserves to be remodelled. There should be no compulsion in the matter, and women wanting to take the general courses prescribed for the boys should be at

perfect liberty to do so. But it is a mistake to think that the best possible intellectual training could not be given to women in ways better adapted to their general mode and mission in life.

During my second European tour Sir Arthur Smithells of Leeds University drew my attention to the King's College for Women, which provides a three-year course in Household and Social Sciences of a collegiate grade, and qualifies for a degree in the London University; the degree, mind you, which ought to reassure ladies who want to become Bachelors! The art of household regulation requires a knowledge and application of a large number of sciences, Physics, Physiology, Chemistry, Biology, Economics and certain portions of law, to mention a few.

Household Science is a field still to be organized and explored in India. Mrs. Sidney Webb once remarked to me that we were the most unhygienic nation in regard to food. The poor have little to eat and the rich don't know what to eat and how to prepare or preserve it—too much ghee, too much sugar, too much spices, too ill-assorted and ill-conditioned food, diabetes, and an early break-up of health and strength—that has been the routine of Hindu existence.

There is a vast literature on the values of the foods that Europeans consume. Indian foods remain to be scientifically investigated.

A woman is also an administrator and domestic economist. She must be able to prepare her domestic budgets with intelligence and forethought.

In India the widow is too often a helpless dependent and victim of her male relations with no idea of her rights and the laws pertaining to inheritance, division of property, etc., and incapable of defending her interests. Now that political rights are being conferred on women, her development as person and citizen has to be given due consideration in our curricula. To rescue our sisters from their condition of helpless dependence is a mission that educated India ought no longer to delay.

The State in Relation to Women.

The organization of the State in relation to women's interests and advancement should be planned out boldly and comprehensively. And I know of no State in India that is likely to take up this task in real earnestness and carry it to a chivalrous success, excepting Mysore. A survey should be made of the number of child welfare centres, women's hospitals, primary and middle

schools with proper provision for vocational training, institutes for imparting a knowledge of household sciences, cottage industries, hygiene, nursing, etc., to the grown-up women, and on that basis the necessary educational and administrative staff and other provisions should be made. Administrative arrangements with special reference to women's needs and progress have not been sufficiently developed in our country. And when developed, they will absorb all the women power that could be produced from our schools and colleges. And they will be absorbed too in ways more natural and healthful to themselves and to society than has been the case till now with the one-sided education they have been getting—an education which does not fit in with the scheme of life of the vast majority of women.

I am deeply impressed by the methodical manner in which the Missionaries as at Hassan and other centres are not merely imparting book knowledge but building up morale and civilization amongst the lowest of our social orders and raising them to the status of efficient, self-respecting humanity. If education and government are conceived in some such broad spirit, as charged with the mission of building up life and civilization, the importance of a systematic organization

of the State in relation to women will be easily understood.

Women's Enfranchisement.

But women's enfranchisement depends ultimately on two factors, the abolition of early marriages and the granting to them of equal property rights with men. So long as she remains an economic outcaste with no property rights in the parental home and nothing more nourishing of body and mind than a maintenance allowance in the husband's, she can never realize her essential humanity. And where woman is not allowed to be fully human, the mentality of society is bound to be, in some degree at least, inhuman. Give her the cash and she will obtain the credit for herself!

Control of Technical Education.

Not infrequently doubts are expressed whether the Vice-Chancellor and the Director of Public Instruction are the best authorities to be entrusted with the management of vocational, industrial, technical and technological institutions that are now generally conceded as being within the scope of the composite, full-blooded modern educational organizations. I am in favour of keeping them within the purview of the Vice-Chancellor and the Director of Public Instruction.

For this reason, management by the Vice-Chancellor in effect means management by the Syndicate on which technical authorities are bound to be represented, and appropriate Faculties and Boards of Studies. Nobody proposes that the Medical College and the Engineering College should be taken out of the jurisdiction of the University.

As regards the Director of Public Instruction, what with the large number of technical and sectional assistants with whom he has been provided, his administration has in fact become administration by a Board of Education. This machinery may be improved by including on the Board representatives of the technical departments of the State. That co-operation and correlation between the Railway, Industries and other departments and the educational administration is desirable and necessary, nobody will dispute. In the principle of the Board system of administration, which ought to be diligently explored, some way may be found for bringing about more expressly that co-ordination. All things considered, it seems best not to remove industrial and technical education from the highway of the State's educational organization and consign them to departmental blind alleys, which would impair their popularity and efficiency.

Medical Colleges and the University.

As regards medical education, the following extract from the report of Sir Norman Walker and Colonel Needham is evidence of the superiority of a University organization with its fixed staff of specialists over Government organization with a floating and miscellaneous staff.

Speaking of the Madras Medical College and Hospitals they say, "The staffs of the College and the Hospitals are provided from the Madras Medical Department; the system is unsatisfactory; it restricts the field of recruitment, and in practice involves too frequent changes in the staffs."

Speaking of the Vizagapatam Medical College they say, "The training in clinical medicine has been seriously prejudiced by frequent changes in the post of Professors of Medicine..... The facilities for training in the special departments have not been developed."

The General Medical Council while dissatisfied with the old state of affairs, appears to be still more apprehensive of inefficiency resulting as a consequence of the Indianization of the I.M.S. and the appointment of more Indians as Professors in the Medical Colleges. It would seem to any fair-minded enquirer that the real sin

consists not in the nationality of the teacher but in the defective organization, perhaps inevitable, under Government management. This aspect has been dealt with in the reply to Sir Norman Walker's criticisms prepared by the Medical Faculty of the Bombay University. They cast the blame on the Governmental system and append statistical tables to prove their point. Not a few men seem to have been appointed as Professors while yet of twenty-six years of age or under. And not a few of the Professors had held as many as six Professorships before they retired. Even in the period between 1900-1910 there have been instances of I.M.S. officers who have held six, five and four Professorships respectively. Pluralism in Professorships seems to have been the rule. Even some of the younger men who were appointed in the period of 1910-1927 as Professors have already held as many as three Professorships; and at this rate before they retire they are likely to box the entire compass of the Medical Chairs going. The Bombay Medical Faculty comments as follows: "When a vacancy arose in one of these Chairs a man had to be found, from amongst the service men, regardless of the fact that none may be available who had special training to fit him for

the appointment." The example quoted by Sir Norman on page 5 of Appendix XV "where the fact that a man had passed the primary examination for the F.R.C.S., England, ten years before was regarded as sufficient proof of his capacity to act as Professor of Physiology" emphasizes the fact that this practice still obtains in colleges where the teaching staff has to be found from the service. Such mutations (or is it mimicries?) are to be met with in the field of the Indian Educational Service also, though not to anything like the same extent.

It is impossible to deny that there is some point in Sir Norman Walker's pessimistic outlook. Defective as the old arrangements had been, Indianization without regard to the right system of recruitment and management, may no improbably result in a graver situation. The saving grace is not to be found either in Indianization as such or in Europeanization as such o any other type or variety of racialization such a Mysoreanization, but if I may venture to say so in direct University management of medica education which will guarantee a specialist and stable staff with every incentive to keep up their studies and engage in research. And paradoxical as it may sound, some Governments ar

inclined to adopt University principles without University management.

In the United Provinces, Government have handed over their Medical College at Lucknow to the University, one result of which has been the spiriting away of one of the ablest of your medical men, Dr. Acharya, from your midst. Other Governments are organizing in response to the criticism of the General Medical Council bodies of specialists for their Medical Colleges. That is to say, while they will not trust the Universities, they will become Universities themselves: Is this a case of imitation being the sincerest form of flattery or one of stealing their robes while Universities are still slumbering over their rights?

Once disentanglement from the Services is decided upon and the organization of a specialist corps adopted in principle, there can be no rational ground for refusing to take the more natural and efficient step of making these colleges integral parts of a teaching University. Let me not be misunderstood. I am deeply grateful to the Services and the organizations that I would like to see supplanted, for the eminent way in which they helped our country in the past and brought her up to a state at which further

developments have become inevitable. But gra tude should not be allowed to obstruct duty.

Technological Colleges and the University.

The moral of this is applicable to oth technological institutions also. That is why the Andhra University Act express provisic has been made for establishing all the technol gical institutions to be organized in the futu under the direct control and management of tl University, of course, with the aid of Gover ment funds.

If it is wisdom to start all future technic colleges under the immediate auspices of tl University, can it be folly to transfer the existir ones to the self-same management? One car follow easily the logic of this hesitation or rath unwillingness. Apparently Universities can l trusted to do the following: to formula syllabuses; to inspect and ascertain if the teachir is up to standard; to hold examinations and grant degrees. But Universities may not l trusted to appoint the proper teachers a manage institutions; I mean Universities in Indi for Universities abroad are of course absolute trustworthy. If direct University manageme is held to be less efficient, then would it not better for the departments to award their ov

diplomas instead of making it incumbent on their students to seek effete University degrees ?

The Essence of a University.

Desirable as all these reforms are and necessary, the essence of University remains to-day what it has always been, namely, a corporation of teachers and taught, a spiritual and cultural entity pursuing knowledge for its own sake, extending the boundaries of Science and Art and functioning as one of the source-powers for increasing humanity's hold on the good, the true and the beautiful. It is this creative spirit that distinguishes a University from the merely distributive function of High Schools. Where that creative spirit is lacking, where it is not conserved and promoted by proper organization and the necessary institutions and facilities inspired by teachers of genius, there we can have nothing more than a Continuation High School.

Sir Ashutosh Mukherjee.

No one can deal with this, the very soul of University organization, without invoking to his aid the spirit of Sir Ashutosh Mukherjee, the pioneer genius who introduced genuine University education in India. Until he established his Post-Graduate College under direct University management, there were in the true sense of the

term neither Universities nor Colleges. Our Universities were mere examining and affiliating Boards; our colleges glorified High Schools.

Young men fresh from Oxford and Cambridge selected on the lax and false test of their college record were started off as Professors put in charge of responsible University work were provided with careers for life and then by sheer force of sumptuous seniority exalted to the headship of departments. No wonder that, as Dr. C. V. Raman has remarked, in most of our Universities, Honours and Post-Graduate courses proved a failure. Even the syllabuses and curricula were not up to date. In many cases they did not represent to any extent growth from within the University but were mechanical importations from the curricula of Western Universities, scissors and paste work! Universities that introduced the distinction between the Pass and Honours Courses were hardly able to maintain that distinction in actual work. Occasionally they tried to enliven the spirit of local teaching by getting a foreign Professor touring in India to deliver a few lectures. If a candidate submitted a thesis for the Doctorate Degree, it had to be exported for adjudication to foreign lands. Even some of our teaching Universities have not come

up to standard in their staffing arrangements. They are trying the speculative expedient of sending out brilliant graduates—gold medalists I suppose, though some one or other is bound to get a gold medal every year—to England, and this educational pilgrimage for a foreign degree suffices to make them Professors for the rest of their lives. Such is the system of outdoor relief of our pauperism in organization that many of our Universities are not only content to live on but flaunt before an ironical world as symptoms of the high efficiency from which they are suffering. Until the patriotic genius of Sir Ashutosh Mukherjee struck the note, the elementary idea of introducing in our Universities conditions of life and work and staffing, which are the routine of the organization of successful Western Universities, did not suggest itself to the rulers in India, though Gokhale as a member of the Royal Commission on the Public Services had with his usual power of constructive criticism hinted at the rightful measures. Sir Ashutosh had to found his limited but genuine University, so famous to-day all the world over as the Post-Graduate College in Calcutta, on the slender basis of private benefactions though Governmental moneys were never lacking for uneconomical

diversions and projects. The old Calcutta University could not be transformed into a real University. Ashutosh's college had, therefore, to be made a Post-Graduate institution, something super-imposed on the University and not so much as the University itself.

Sir Ashutosh's example has not been without a following. Lucknow and Allahabad have reconstituted themselves as Universities true to type. The Andhra Desa is in the throes of a similar labour, but the agony has been too prolonged.

Principles of Staffing.

If Colleges are regarded as Continuation High Schools, in which what is aimed at is detailed lecturing, the pumping of copious information, digested into notes, into the minds of students, preparing them for examinations, mass production of graduates qualifying for nothing more inspiring than clerical jobs, the Professors too would be recruited on the same principle as High School teachers. They would be chosen merely on their college record and appointed for life. They would be given graded appointments on the assumption that the older they grew the more efficient they became, and there would be talk of graduates of ten years standing and twenty years standing, though very often it is a case more of

stooping than of standing, as though intellects mature by sheer process of time, like wine in wood.

It was with a view to prevent the miscarriage of the objectives of University education that the following recommendations which have served as the basis of the staffing scheme now adopted, were made by the Andhra University Committee so early as 1921 :—

"The University should be manned by Professors of high standing who would be able to stimulate the character and intellects of the students and inspire them to enquiry, research and propaganda."

"In the Honours and Post-Graduate courses students should be more guided than taught and they should be made, as far as possible, to discover knowledge for themselves rather than have it crammed into them by notes and text-books."

"It is desirable that Professors should be appointed for a period of ten years but subject to eligibility for re-election. But if the limitation of the term to such a period cannot secure the proper type of Professors, *it would be better to make the conditions of service more attractive as by higher salaries, etc., than to abrogate the principle of limited tenure.*"

"Where specialists have to be employed, the best men should be secured irrespective of nationality, though other things being about equal, preference should be given to Indians, and in the case of such specialists the University should pay whatever sum is necessary to get their services."

The actual scheme adopted in principle by the Andhra academic authorities is as follows:—

(1) University appointments should not be made on the basis of the college record of the applicants but on the basis of their original work and research.

(2) Nor should they be on life tenure but on a limited tenure of five to seven years according to the nature of the subject, but with eligibility for reappointment. (This was one of Gokhale's main points.)

This means, of course, that only specialists should be appointed, the educational consequence of which is that the courses should become more diversified and greater choice given to students to specialize. Optional courses should be enormously increased, the result being small classes, less lecturing, the students being left to work for themselves under general guidance, mental and moral development of the students to a greater

extent than is possible under the system of detailed lecturing and mass production of graduates, and hopeful preparation for genuine intellectual life.

(3) As at Lucknow, the Syndicate may, for special reasons, appoint a Professor on special terms.

There will be no Assistant Professors and the word Assistant connoting some kind of personal subordination to a superior has been abolished from the Andhra classification. Professors, Readers, etc., will have their own spheres of work, arranged by the Faculties and all will have enough leisure to pursue their researches and satisfy their moral craving for name and fame. Even though there may be differences in material conditions, there ought not to be any in the fellowship that should prevail. The Vice-Chancellor himself should function as a brotherly elder without assumption of superior authority or superior wisdom. Nothing is so destructive of the integrity of University life as the mandarinism of mediocrities, breeding jealousies, producing an atmosphere of self-centred calculations, and breaking up comradeship. With a genuine University staff, segregated from the Civil List and intent on high-souled pursuits,

this will not happen, but a fraternal spirit will prevail.

In Western Universities, Professors not uncommonly lecture sometimes only one hour a week but never more than three to four hours a week and they lecture on the subjects of their own research and not necessarily on examination topics. These latter are attended to by the Lecturers and Readers but even they are not so heavily worked as High School teachers, because, since all are appointed on account of their original work, they must be given time and scope for carrying on their researches as otherwise it would result in a criminal waste of talent. There should be far less lecturing in our colleges and great many more lecturers to do that less lecturing!

The way to Lecturerships, Readerships and Professorships must be prepared by a large scheme of Fellowships. The most brilliant men, men with clear promise of originality, should be made Fellows on an adequate allowance, say Rs. 150 a month, the allowance adopted in the Andhra University, so that they may be saved from the worry of creature necessities. The Fellowships should be tenable for a period of, say, three years and such of the Fellows as fulfil expectations should be drafted on to the teaching posts.

In the recruitment of the staff, merit should be the only consideration. Students should not be defrauded of their right to receive the best and most inspiring training under the plea of localism or communalism. A University organization of this type would obviate the evil of what Sir P. C. Ray has called mass production of graduates and consequent unemployment of the educated. Once High School methods are discontinued at the college stage, students incapable of working according to University standards will drop out. Employment of specialists, diversified courses, increased options, smaller classes, self-help and self-reliance on the part of students, the joy of research work, the disinterested pursuit of knowledge, and daily contact with noble souls—all these go together, and they will help to obviate both mass production of graduates and sterile, insignificant careers. It is miseducation, not over-education, that has been the bane of the country.

I think the ideal University will in its form and constitution be as democratic and autonomous as the Andhra University and in the field of substantial work covered, an amalgam of the Calcutta Post-Graduate College and the Lucknow and Mysore Universities. Has not Sir Ashutosh's

College been a glorious success? Are not the Palit, Ghosh, Hardinge, King George V and other Professorships a world-asset to-day, and if the Calcutta College could succeed in producing such an amazing amount of research in every branch of learning, why should any one doubt the success of an institution of the kind imagined here—it may be a dream to-day but I trust it will be a reality soon—thus organized and having a wider range of activities?

Even a crore of rupees is not the limit of useful expenditure on a University. Our governments are not spending on their Universities a tenth of what they should—not even Mysore.

Lord Goschen on the Ideal of the Andhra University.

His Excellency the Chancellor of the Andhra University in laying down his policy thus expressed himself in his inspiring address to the last Andhra Convocation, an address which has been hailed as the Magna Charta of the University:—

"The ideal that we have set before us is the development, not of a University in the sense of a brick and mortar structure, but a University community—a large and mutually stimulating and inspiring community of Professors with an assured standing for creative output, and Researchers and

Scholars. It is only by evolving such a community that we should be contributing our solution or rather the academic factor in the solution of the problem of building up a healthy, strong, well-balanced judgment and character in the youth of our country."

Ah, if only institutional reality could soon be given to these noble aspirations.

Character and College.

If the youth of our country are lacking in judgment, will and character, it is to some extent because of the defective nature of the education they receive at the University. We prolong their boyhood from High School to College and then we wonder that they don't grow up into manhood but remain boys with all the attractions and weaknesses of boyhood. At one moment they would be going about as though they were possessed of all knowledge and could bring about the instantaneous salvation of India if only their way was not barred by their elders, whose wisdom and experience they treat as naught. To such I can only repeat the scornful admonition of the old moralist, who was apparently thinking of graduates in their academic caps, "Remember thou art a chicken just hatched with the shell still on thy head." Anon these same graduates at the first

icy touch of life's sharp realities will be seen going about or rather drifting about with helpless look and hopeless outlook beseeching people to advise them as to what they should do. They know how to prepare themselves for examinations but the series of examinations having ended, they do not know what to do with themselves. If there were examinations and parental financial assistance till they reached 55 years of age, when they could retire on a pension, that would be near to their notion of an earthly paradise. If the intellectual and social discipline—I hope they have had both—connoted by a four-years University career has not helped them to find their bearings in life, has not given them judgment, taste and will sufficient to enable them to determine their careers, no Convocation Address could avail to save such ineffectual craft from foundering miserably. This is one reason why I have avoided the tone of moral exhortation customary on these occasions. I am tired of the annual letting off of idealistic fire-works in the Convocation sky and sentimental adoration of the departed glories of Nalanda, Takshasila and Amaravati. The Hindu mind revels in myth-craft; and once you are departed, you can safely reckon on becoming a glory! It is the duty of those that are not amply

confident of building a big future to reverse their attention and create a glorious past; and this duty we have always fulfilled to our entire and exclusive satisfaction.

Our True Task.

The true task before us is to bring these ideals down to earth and give them body, shape and functioning power in organization, institution and administration. True, their working can never be automatic—either fool-proof or knave-proof—and must depend on character and personality. However much we may give institutional regulation to our moral aspirations, there is always an elusive soul beyond the reach of analytical grasp and administrative envisagement which can be felt only by intuition; a mystic surd, racial and individual, which cannot be resolved into rational factors but which is the source of all power and vital virtue, the grace and salvation of life. Where that soul is lacking, institutions like bodies will decay. The recent history of India shows that the soul of our people is not dead but alive and capable of expressing itself in spite of the debris and disabilities heaped upon it by ages of disastrous history. Whoever would have thought that Sir Ashutosh's College entirely staffed by Indians would in a decade produce

such an astonishing amount of original work, astonishing alike in volume and quality and prove an acquisition to world-culture? "United like word and meaning," like beautiful word and soulful meaning, that pregnant phrase of Kalidas aptly describes the happy conjunction needed for realizing the fulness of life. The power of thought is there in our countrymen; the soul, imperishable, sublime; only the instrumentality of institutions is lacking. It is for the rulers and leaders of India not to be content with sentimentalizing over ideals and providing merely verbal incentives to lofty conduct but to bestir themselves with vigorous and honest purpose to the task of establishing the requisite secular conditions and organizations. Then would our spiritual revival be assured and abundant.

Mr. Vice-Chancellor, let me conclude by conveying to you and the Mysore University the greetings of the Andhra University and wishing the graduates assembled here useful and happy careers.

Address delivered at the Convocation of the University of Mysore, on the 24th August 1929, by Sir C. V. Raman, Kt., M.A., D.Sc. (Hons.), F.R.S.

MR. VICE-CHANCELLOR, LADIES AND GENTLEMEN,

I felt highly honoured by the invitation to address this Convocation, and did not hesitate to accept it, even though, coming at a time just prior to my departure for Europe on scientific deputation, it has involved a certain dislocation of my work. For many years, I have felt a keen interest in the fortunes of Mysore, and of late my visits to the State have been so frequent that I might almost claim to be acquiring a domicile in His Highness' territory. The fact that Mysore has in the past offered scope for the activities of such distinguished administrators as Sir K. Seshadri or Sir M. Visvesvaraya, and claimed the allegiance even temporarily of a Brajendra Nath Seal or a Radhakrishnan is in itself sufficient to invest the State with a certain halo of glory. There is much in Mysore to arrest the attention of every educated Indian. The great works of public utility at Sivasamudram and Krishnarajasagara, and the industrial activities of the State at Bangalore and Bhadravati, would alone

Sir C. V. Raman, Kt., M.A., D.Sc., F.R.S.

have been sufficient to set Mysore on a pedestal, to be viewed with respectful admiration by other parts of India. The fame of Mysore has been spread far and wide by these and other evidences of the wisdom and enterprise on the part of her ruler and of those who have helped in her administration. As a man of science, my whole-hearted admiration goes out to that act of far-sighted policy which led to the establishment at Bangalore of the Indian Institute of Science. The full fruits of that act may yet some day be reaped in a harvest of fame and wealth for the Mysore State, nay, for all India. For several years, the affairs of the Institute have claimed my personal attention, and it has been my constant endeavour to try and hasten the advent of that glorious day.

At no time in the history of India, so far as I am aware, did the cultural contacts of the different parts of our great country altogether cease. Developments in any part of India have had, and will continue to have, repercussions in every other part of the country. For this reason, if for no other, the progress of Mysore will be watched with the keenest interest in other parts of India. If Mysore advances, it will rejoice the heart of every Indian. If she lags behind, the rest of India will also suffer. No one doubts to-day that

Mysore has a special and distinctive contribution of her own to make to our national culture.

As one instance of the way in which different parts of India can benefit by an exchange of ideas, I can mention the activities of the Indian Science Congress. I have even to-day the most vivid recollection of my first visit to Bangalore in 1917. Many pictures stand out in my memory, of those few days of hectic activity. The unaffected, though impressive, kindness with which the delegates to the Congress were received by His Highness in the grounds of the Palace amidst the sweet strain of Indian music, the first impressions of Bangalore with its notable public buildings and a general aspect so strikingly individualistic, the odoriferous activities of the sandalwood oil factory, the great campus of the Indian Institute of Science which for the time being became an arena for a boomerang display by a former Director-General of Observatories, these and other vignettes remain firmly impressed in my memory. Remarkably enough, however, what interested me most in that visit to Bangalore was a little tube of glass six inches long and half an inch broad which I saw used in a demonstration at one of our meetings. That little tube of glass filled with the glowing vapour of mercury and

emitting a dazzling white light came to me as a revelation. It opened my eyes to the immense power of the mercury arc as a tool of scientific research. You have all read in the "Arabian Nights" the story of how Alladin discovered, by accident, the secret of the wonderful lamp that was later to bring him wealth and fame. Alladin rubbed the lamp, and out came a mighty spirit ready to do his bidding. It is no exaggeration to say that the quartz mercury arc is the veritable Alladin's lamp of modern physics. Under the touch of the electric current springs from it a mighty spirit, travelling with the velocity of light, capable of performing the most wonderful tasks, a spirit capable of making itself as small as a hundred millionth part of an inch, nay, of entering within the atom or the molecule itself and of exploring its internal structure. It was no accidental coincidence that eleven years later, it was the same mercury arc lamp which served me to discover the new radiation effect which you may have heard of, and it was equally no accident that within a few days of the discovery, I chose a group of scientific men gathered at the same Central College at Bangalore as the audience before whom to place the first scientific account of the discovery.

There is no sphere of human activity which tends to draw peoples of divers lands and cultures together and create bonds of sympathy and friendly understanding so much as the pursuit of knowledge. Knowledge is universal by its very nature. A fact of nature newly discovered is a discovery whose significance or utility cannot be altered by the colour of the discoverer's skin or his nationality. Hence, recognition of such discovery is usually spontaneous. A striking example of this is furnished by the fact that the bitter feelings existing between England and Germany during the war did not prevent Englishmen of science giving the fullest and promptest recognition to the work of Einstein. The speedy reconciliation of England and Germany that has followed after the war is, I believe, due not a little to the cultural and intellectual domination which Germany continues to exercise over the whole world and which remains unaffected by her defeat on the field of battle.

Intellectual activity of the highest type such as every University should strive to develop is a force of incalculable power and importance for the national welfare. Apart from the direct results of such activity in promoting agricultural, industrial or commercial progress, its indirect

results are even more important. Intellectual stagnation is equivalent to national decay and death. Intellectual activity, on the other hand, leads to a quickening of the national life in all its aspects. To a normal human being in full possession of his faculties, the ideal of healthful happiness is not a life of slothful inactivity or placid contemplation, but one of varied activity, both physical and mental, interspersed by the minimum periods of rest which Nature demands for recuperation. Either physical or mental activity by itself is incomplete and insufficient for the maintenance of human efficiency at its highest level. The mainsprings of intellectual activity in every country are education and the spirit of inquiry, and its quality varies with the standard set by the thinkers and educators of the nation. Thus, in the last analysis, it is the leadership offered by the Universities that determines the level of intellectual activity in the country and therefore also the national efficiency.

In thus drawing attention to the relationship between national welfare and the work done in the Universities, I would wish to emphasise the danger of allowing such work to degenerate into a deadly routine of formal teaching and formal examination. The tendency of all formal schemes

of education is to regard the human mind as a kind of soft metal to be squeezed into shape by intense pressure into the hard steel moulds of syllabuses and examinations. This kind of mechanization of education is, I believe, most deadly in its effects, and is responsible for not a little of the intellectual sterility of the finished products of our Universities. The essence of education is the development of individuality and personality, and it is easily possible to carry the idea of formal training and intellectual discipline to the point of extinguishing such individual development. I would say that the good is often the enemy of the best. Formal training should make way in favour of individual freedom of study and work wherever and whenever the latter promises the best results. It is here that the discernments and sympathy of the teacher are most needed.

The ideal of University work is the provision of opportunities for special abilities, of teacher as well as of students, to express themselves. How this is to be done without dislocating the general activities of the University is, I consider, one of the most important problems in University administration, and its successful solution requires the most careful and sympathetic consideration. It is my conviction that, at the present time, Indian

Universities generally pay less attention to the development of special activities and abilities and more to purely routine activities than should really be the case. In a general way, of course, the differentiation between pass and honours courses recognizes the importance of giving special opportunities for special ability. But this, in my view, is not enough. There should be greater freedom for the expression of individual ability, and more time and opportunities for research work, for teacher and student alike, in those cases where evidence of ability to profit by such opportunities is forthcoming.

During the last few years, there has been a growing recognition that India is not a negligible factor in the advance of human knowledge. I will go further and say that the world outside has begun to learn that the Indian intellect can occasionally march abreast, or perhaps even lead, in the onward march of scientific progress. This is certainly a position in advance of that freely expressed ten years ago that the Indian mind was by nature sterile, and is, in my opinion, largely the result of the work of the younger generation of scientific workers in India during the last ten years. But the position reached is, in my opinion, still quite unsatisfactory. A great many new Universities

have sprung up all over the country and in many of them Indians are holding appointments with some opportunities for original work. Some of them are, no doubt, showing praiseworthy activity. But taken altogether, I think, not enough is being done. The reason for this is a matter which I would recommend to the University administrative bodies all over India carefully to investigate and set right without delay. In some cases, it may be lack of opportunities for research, by reason of excessive insistence on routine teaching; in others it may be lack of research equipment. I hardly think the lack of competent students or helpers can be the cause. If there is any point on which I feel a confidence derived from experience, it is that there is abundance of talent in the younger generation awaiting the right kind of leadership.

The field of human knowledge at the present time is in an extremely interesting state. The principal feature of the activity of the nineteenth century may be described as the fragmentation of knowledge into a large number of small holdings with uncultivated boundaries between them—mathematics, astronomy, physics, chemistry, geology, botany, zoology, sociology, economics, politics, psychology, philosophy and so forth. During the last twenty years, however, a strong

movement has set in towards a new synthesis of knowledge. A change has occurred in our philosophic outlook which is tantamount to a recognition that, in spite of her immense diversity, Nature is still one and indivisible. The barriers artificially set up by the nineteenth century between the different branches of knowledge are fast crumbling to pieces and in many cases, for instance as between physics and chemistry, have completely disappeared at the present time. The current of present-day progress thus gives a new strength to the University idea which recognizes the essential impartibility of that great estate which we call human knowledge. Not only so, but this also gives us fresh reason for hoping that India with her well-known power of synthetic and philosophic thought may yet, if she exerts herself, rise once again to a position in which she can lead the world in intellectual advance. But this is a mere possibility and to convert it into an actuality requires strenuous effort, and calls for a revival of our ancient love of learning compared with which the Renaissance of Europe in the Middle Ages would sink into insignificance.

The spirit of modern knowledge is repugnant to vague and unsupported speculations. An unhesitating rejection awaits generalizations, however

attractive, based on mere sentiment or belief, or on an incomplete analysis of experience or experiment. Rigour, logic, precision, attention to detail, a disinclination to gloss over essential differences, and the most rigid power of self-criticism,—these are what modern science demands. These habits of mind are hardly developed by the mere passive absorption of knowledge in the lecture room or library. Indeed, knowledge as embodied in a formal treatise or lecture is apt to convey an impression of static perfection which is deceptive and induces the mind to adopt an attitude of uncritical acceptance. The highest qualities of mind are evoked by knowledge which presents itself in a dynamic but imperfect form, calling for criticism and personal investigation for its adequate appraisal. This is the real value of research as an instrument of education in itself. The attitude of mind habitually adopted by the investigator is the one that not only leads to the advances of knowledge, but also develops his own inherent intellectual powers and enables him to apply his store of knowledge with success to new or old problems that press for solution. The promotion of such an attitude of mind in the intellectual products of the University is a matter of the greatest importance for the welfare of the State.

Real culture includes within itself an appreciation not only of intellectual values but also of social virtues. A truly cultured man has no use for dogmatisms, fanaticisms or unreasoning beliefs or prejudices of any kind. A University ceases to be a temple of learning and becomes a breeding place for the microbes of ignorance if it lends itself to the propagation of the religious antagonisms and of the communal jealousies that disfigure the public life of our country at the present time. A University should, above all things, be a place where personal ability and personal character are alone the passports to success, and a broad tolerance enables men of divergent views to work together for a common cause. If our Universities are animated by such ideals, they will prove a much more potent power for the building up of a great nation than Congresses and Councils, and solve the problem of the future of our country more effectively than Leagues and Legislatures. It is my earnest hope that the younger generation of University-trained men will in this matter have a saner outlook than our self-constituted political leaders. It is to you that I look to see the country set on the high road which leads to national honour and regeneration, and not on the wrong turning which can only lead to national humiliation and decay.

No convocation address can be complete which altogether avoids the political issue. There is no denying the existence to-day, both in British India and in Indian India, of political unrest. There is, however, no better tribute to the wisdom of the administration of His Highness the Maharaja than the fact that this problem is much less acute in Mysore than elsewhere in India. It is often suggested that unrest is due to education and will disappear with a restriction of educational facilities. I entirely disagree with this view, and believe that the real cure for unrest is an extension of education and the provision of special opportunities for those qualified by special energy, intelligence and ability to advance knowledge, to promote its useful applications and thus add to the national efficiency and wealth. On the broader issue of national self-determination, I will suggest to the young graduates of this University, and to others in a similar position elsewhere, that if we wish men of other nations to respect us and yield to our wishes, we must learn to respect ourselves and make ourselves worthy of respect from others. We must abolish slothfulness and self-indulgence, and substitute in their place a mentality that recognizes the highest form of human happiness to be that which is reached by

labour and self-restraint. We must put aside a spirit of defeatism and put in its place a spirit that glories in the overcoming of obstacles. We must learn to appreciate and use the products of Indian labour, however imperfect they may be. We must acquire by labour and thought the secret of craftsmanship which lies in meticulous attention to detail and the continual striving after perfection. We must refrain from copying the vices and expensive habits of other countries and never forget that alcohol and nicotine are the deadliest of poisons known to humanity. Finally, we must never forget that the strength of our people depends quite as much on our women as on our men. The richest rewards are the fruit of labour, study and thought. Self-determination will come, but we must prepare ourselves for it. It is no use asking for freedom if we are not prepared to pay the price for it.

Graduates of the Mysore University, it has been my privilege during the past few years to come into intimate contact with several members of your University, both teachers and students, and to learn to appreciate their zeal and enthusiasm, and the valuable contribution that the Mysore University is making towards the promotion of sound learning in Southern India. I have

been very fortunate during the past few years to have been able to welcome a number of students from Mysore to my laboratory at Calcutta and the ability and industry they displayed was a credit not only to themselves, but also to their teachers and the training they received in your University. Some of them even displayed striking originality and capacity for research, and it is a matter of great regret to me that lack of financial resources prevented me from inducing them to continue their researches at Calcutta beyond the stage of the Master's Degree in Science. I have, however, endeavoured to be of service to such men in procuring for them a suitable career in life. I know also that students from Mysore who have come to Calcutta to study other branches of science besides physics have won the warm admiration of my colleagues in the University by their capacity and zeal. All this reflects the highest credit on your Alma Mater, and it is my earnest hope that you will resolve in your future career to serve her interests as best as you can. I join with your teachers in wishing for you a prosperous and successful career in life according to your respective abilities. Farewell.

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